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This Month in the PSM

This issue of the *Petroleum Supply Monthly* features "Distillate Fuel Oil Overview: Winter 1983-84" (p. ix). This article discusses the outlook for distillate fuel oil during the upcoming heating season based on projections from the Energy Information Administration's most recent *Short-Term Energy Outlook*. This article is followed by "Fuel Oil Trends" (p. xi). This article provides a petroleum overview and highlights distillate and residual fuel oil. A third article, "U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves," (p. xvi) presents an advance summary of information from the *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1982 Annual Report* scheduled for release next month by the Energy Information Administration.



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Petroleum Focus



Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	August			Cumulative January Through August		
	1983	1982	% Change	1983	1982	% Change
Total Product Supplied	15.2	14.8	2.3	14.9	15.4	- 3.0
Motor Gasoline	7.0	6.6	5.4	6.6	6.6	0.5
Distillate Fuel Oil	2.4	2.2	9.4	2.6	2.7	- 4.2
Residual Fuel Oil	1.3	1.5	- 17.6	1.4	1.8	- 22.1
Crude Inputs to Refineries	12.3	11.9	3.2	11.6	11.8	- 1.5
Crude Oil and Natural Gas Liquids Production	10.2	10.2	0.3	10.2	10.2	0.3
Net Imports ¹	5.3	4.4	20.8	4.0	4.2	- 5.6
Net Crude Oil Imports ²	3.7	3.3	9.4	2.8	3.1	- 9.5
SPR Imports	0.3	0.2	58.7	0.2	0.2	44.8
Net Product Imports	1.3	0.8	56.9	1.0	1.0	- 2.1
Crude Oil Stock Withdrawal ²	- 0.11	- 0.23	—	0.02	0.04	—
Product Stock Withdrawal	- 0.43	- 0.04	—	0.22	0.44	—
Stocks at End of Period (Million Barrels)						
Crude Oil ²	350	353	NM			
Motor Gasoline ³	223	227	NM			
Distillate Fuel Oil	142	159	NM			
Residual Fuel Oil	46	53	NM			
Total Product	756	782	NM			
SPR	351	274	28.4			
Total	1,458	1,408	NM			

¹Gross Imports of crude oil including Strategic Petroleum Reserve (SPR) and petroleum products less exports of crude oil and petroleum products.

²Excluding SPR.

³Including blending components.

NM = Not meaningful due to new stock basis.

Note: Percent changes are based on unrounded values. August 1983 data are estimates based on weekly data, except for export and Natural Gas Liquids Production estimates which are July 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.

Source: Energy Information Administration, *Petroleum Supply Monthly*, September 1983.

Distillate Fuel Oil Overview: Winter 1983-84

The Energy Information Administration (EIA) projects an average demand level of about 3.2 million barrels per day (MMBD) for distillate fuel oil, during the winter of 1983-84 (October 1983 through March 1984). EIA's projections assume economic recovery, normal weather, and stable or falling prices.¹ The projected demand is about 17 percent higher than the abnormally low winter 1982-83 level of 2.7 MMBD. Despite lower distillate inventories than any end-of-August levels in the last decade, ample time, refining capacity, crude oil stocks, and import capability exist to generate sufficient supplies to meet expected winter demand.

These demand projections are predicated on an average retail price for No. 2 heating oil about 9 cents per gallon less than last winter's average of \$1.16 per gallon. EIA's forecast also assumes a return to normal winter weather. Last winter was the warmest in 30 years, and the population-weighted heating-degree days were about 8 percent below normal. Also, a substantial increase in industrial production over winter 1982-83 levels is assumed.

Distillate demand is highly seasonal, peaking in the winter and falling off in the summer. Seasonal fluctuations in demand have diminished somewhat over the last decade with the steady growth of non-heating uses of distillate. In 1982, half of all deliveries of distillate fuel oil were for transportation uses.

Each summer, refinery production of distillate exceeds demand as refiners build stocks for the heating season. Distillate production reached 2.6 MMBD in August 1983, approximately 0.2 MMBD above demand levels. In recent years, up to 20 percent of production from May through September has been used for building stocks of distillate fuel oils to their seasonal peaks. Distillate production is greatest during the winter months. In 1982, production peaked in November when production rates of 2.9 MMBD were reached. Thus far in 1983, refinery utilization has ranged between 65 and 75 percent. Thus, the capacity exists to produce distillate at 1982 rates or higher and allow refiners to meet demand while building stocks for the heating season.

¹ Energy Information Administration, *Short-Term Energy Outlook* (August 1983), DOE/EIA 0202(83/3Q)-1, (Washington, D.C., 1983).



Crude oil supplies needed for increased production levels are readily available. Crude oil stocks have measured between 341 and 366 million barrels in the past year and were 350 million barrels at the end of August. Crude oil supplies are also available from foreign sources, at prices below those of 1982: the first quarter 1983 crude oil refiner acquisition cost averaged \$29.61 per barrel compared to \$33.05 in the first quarter of 1982. Imported crude oil has been slightly less expensive than domestic crude oil since March 1983, and crude oil imports have revived accordingly.

About 19-20 percent of the yield from refineries is distillate fuel oil, while over twice that amount, on the average, is gasoline. Efforts to build distillate inventories through increased refinery utilization would produce large quantities of motor gasoline. Gasoline demand was essentially flat this past summer, and motor gasoline inventories are at a comfortable level. Thus, there is not a strong incentive to build distillate inventories through production alone, as this could result in larger than desired gasoline inventories.

The alternative to building inventories through production is to increase net imports (gross imports minus exports). Between 1973 and 1981, net imports accounted for 5 to 12 percent of distillate product supplied on an annual basis, but the pattern for net imports of distillate

changed in 1982. Net imports were equivalent to less than 1 percent of demand. Gross imports averaged 93,000 barrels per day, their lowest level in a decade, but, the most notable change was the development of sizable distillate exports. Distillate exports, which had never in the last decade exceeded an annual average of 9,000 barrels per day, reached 74,000 barrels per day. In some months of 1982, exports even exceeded imports and continued to do so in the first three months of 1983.

The top sources of imports in 1982, and for the first four months of 1983, were Western Hemisphere locations (the Virgin Islands, Canada, Puerto Rico, and Venezuela); the top export destinations were more diverse (Japan, Mexico, and the Netherlands). Thus far in 1983, exports have been averaging slightly more than in 1982, with the Far East continuing as the most frequent destination.

Although distillate inventories were at their lowest end-of-August levels in more than a decade, the refining capability, crude oil stocks, and import capability are available to meet demand during the upcoming winter heating season. These sources can be tapped well in advance of the peak consumption period from December through February.

Fuel Oil Trends

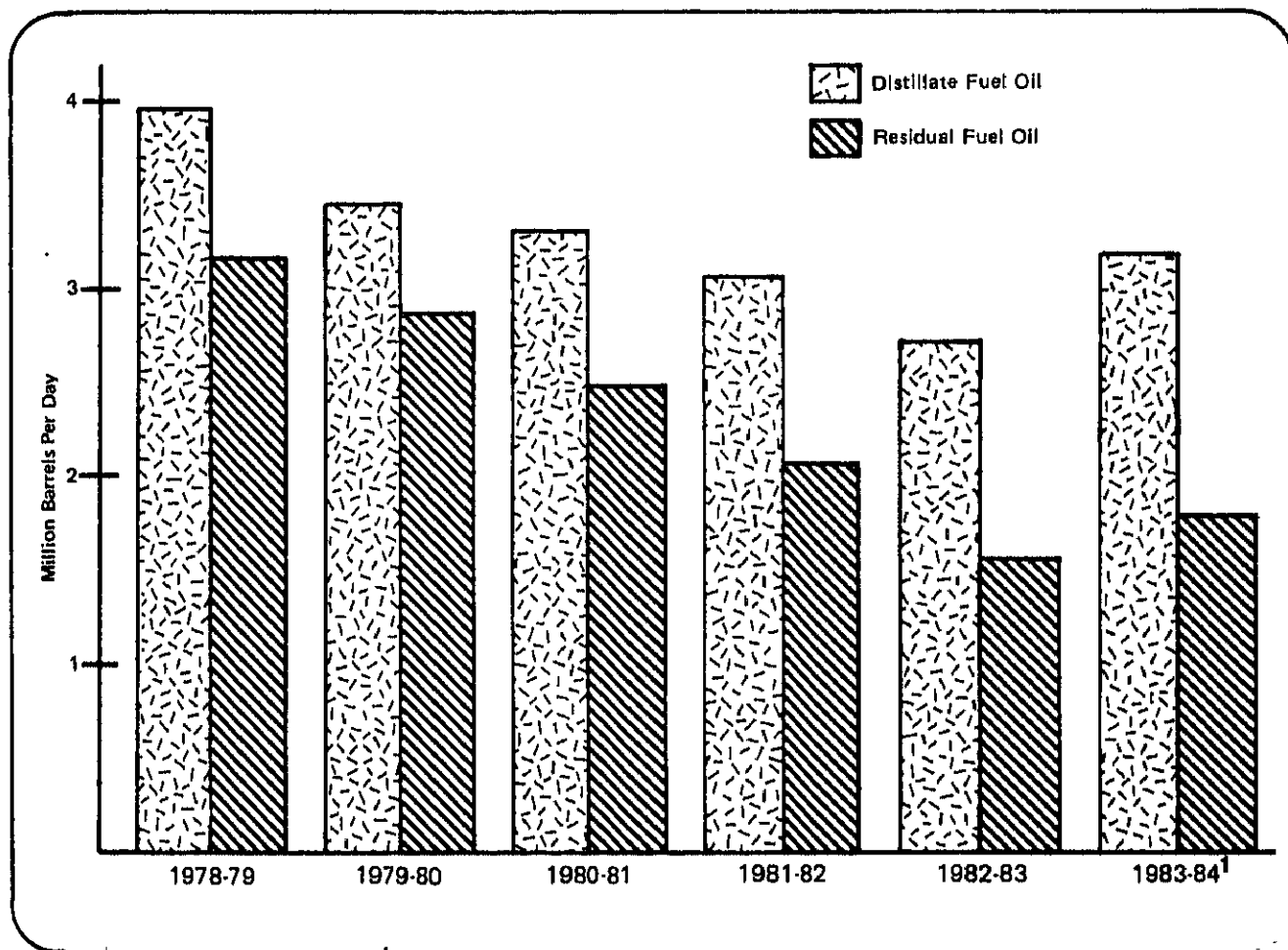
Demand for distillate and residual fuel oils during the coming winter is expected to be well below the peak levels of 5 years ago, but higher than the unusually low levels of the 1982-83 heating season. (See Figure 1). Demand has fallen each year since 1978, because of higher prices, low levels of economic activity, unseasonably mild weather, conservation practices, and fuel switching. Proportionally, the use of distillate fuel oil for home heating has declined, while transportation use of distillate fuels has increased, thereby reducing the amplitude of seasonal differences. Regional distillate demand patterns have changed only slightly. The use of residual fuel oil for electricity generation, the principal end use for this fuel, has also declined steadily over the 5-year period.

Petroleum Overview

Demand for petroleum products peaked in 1978, when the United States consumed an average of 18.8 million barrels per day (MMBD). Since then, a number of factors have contributed to changes in demand for petroleum products including distillate and residual fuels. Some of these factors are:

NOTE: Unless otherwise referenced, the data contained in this article are based on petroleum supply statistics published by the Energy Information Administration (EIA) in the *Weekly Petroleum Status Report* DOE/EIA-0208(83/36), *Petroleum Supply Monthly* DOE/EIA-0109(83/09), *Petroleum Supply Annual* DOE/EIA-0340(83/1 and 2) and predecessor reports. EIA's *Short-Term Energy Outlook* DOE/EIA-0202(83/3Q)-1 (August 1983) is the source for projections.

Figure 1. Heating Season Demand for Distillate and Residual Oils (October - March)



¹ Projected.

Source: Energy Information Administration, *Petroleum Statement Annual* (1978-1980), *"Petroleum Supply Annual (1981-1982)," "Petroleum Supply Monthly"* and *"Short-Term Energy Outlook (1983-1984)."*

- **Crude oil prices:** Middle Eastern events in the late 1970's led to supply disturbances that helped push crude oil prices upward to nearly \$40 per barrel by early 1981. Although prices have subsided to an average of about \$29 per barrel, this is still nearly double the level in 1978.
- **Conservation:** As oil prices escalated, Americans turned to measures such as smaller cars, more insulation, conversions from oil to gas, electricity, or wood, supplemental use of solar energy, and more efficient furnaces and boilers to reduce fuel oil demand. Whether or not such activities have "peaked out," at least for the short term, will be a factor in determining future demand levels.
- **The economy:** While real Gross National Product (GNP) grew at an average rate of 1.4 percent per year from 1978 through 1982, the ratio of energy consumption to GNP fell by more than 10 percent.
- **Weather:** The 1982 weather was a temporary factor in the reduced petroleum demand. Measured in terms of population-weighted heating degree days, last winter was about 8 percent warmer than normal. Summer cooling requirements were lower as well, further reducing demand for electricity.

As a result of these factors, total demand for petroleum products had fallen to 15.3 MMBD by 1982, almost a 20-percent drop in 4 years. Net imports of crude oil and petroleum products had also dropped almost barrel-for-barrel with the drop in demand. Net imports in 1982 were only 4.3 MMBD, just over half of the 1978 level. Alaskan crude oil has been a major factor in reducing our dependence on foreign oils. Alaskan production topped 1 MMBD for the first time in 1978 and has averaged more than 1.6 MMBD for the last 3 years.

Data for the first half of 1983 show that both total petroleum demand and net imports have continued to drop, despite recent signs of economic recovery and stable crude oil prices. Petroleum demand averaged less than 15 million barrels per day to midyear, about 4 percent below demand during the first half of 1982. Net imports have again fallen almost barrel-for-barrel with the decrease in consumption, or about 500,000 barrels per day. Net imports of crude oil and petroleum products averaged 3.5 MMBD during the first 6 months of this year. The unusually mild winter of 1982-83 was a major, although temporary, factor in this continued decline.

Economic recovery, stable prices, and the return of normal weather patterns are expected to lead to increased petroleum consumption during the second half of 1983. Preliminary data indicate that this trend is already under way.

Net imports of crude oil (including imports for the Strategic Petroleum Reserve) are expected to increase from 2.8 million barrels per day last winter to 4.0 million barrels per day in the coming winter. This is about a 40-percent increase over last year's level, but is well below the peak annual average of 6.6 million barrels per day recorded during 1977. Petroleum products imports are

also expected to increase as a result of reduced primary stock withdrawals. Net imports of crude oil and petroleum products, which averaged almost 3.7 MMBD during the last winter, are expected to average about 5.3 MMBD this winter.

Distillate Fuel Oil Trends

Distillate consumption in 1982 declined for the fourth consecutive year from 1978's peak of 3.4 MMBD. The 1982 demand level was the lowest in more than a decade. Based on preliminary data, demand for distillate fuel oil, measured as product supplied, averaged 2.6 MMBD for the first 8 months of 1983, compared with 2.7 MMBD for the comparable 1982 period.

Both production and stock level trends for distillate have also been downward. Based on preliminary data, production averaged 2.6 MMBD for the first 8 months of 1983, down from the comparable 1982 rate of 2.7 MMBD. Stocks at the end of August were 142 million barrels, about 17 million barrels below the comparable 1982 level. Net imports of distillate fuel oils have virtually ceased since the United States began exporting modest amounts of distillate to Japan, Mexico, and Western Europe in 1982. Primary distillate fuel oil stocks this year were virtually the same as comparable 1982 levels, but considerably lower than the stock levels maintained just 4 or 5 years earlier.

Demand for distillate fuel oil, including home heating oil, diesel fuel, and distillate burned at electric utilities, is projected to increase about 17 percent during the winter of 1983-84 compared to last winter's levels. Demand for diesel fuel is also expected to increase about 50,000 barrels per day, due to increased economic activity and a continuation of the gradual penetration of diesel engines into the stock of motor vehicles.

Retail heating oil prices are expected to fall from an average of \$1.16 per gallon last winter to about \$1.07 per gallon during the upcoming winter. This represents about a 12-percent decline in real dollars. (This expectation is predicated on a continuation of current world oil prices, in nominal terms, through March 1984).

Supply Availability

The projected increase in demand is expected to be supplied primarily through increased refinery throughput. Refinery production of distillate is expected to average almost 3 MMBD during the upcoming winter, compared with 2.5 MMBD last winter.

Although stocks of distillate are low by recent historical standards, even in a colder-than-normal winter, assuming no major disruptions in the international flow of crude oil, demand can be met by a combination of increased production, stock withdrawals, and imports (see Figure 2). Refinery utilization rates during August averaged about 75 percent; thus, refinery capacity is readily available to increase production. Both crude oil

and distillate fuel oil are currently available in international markets, and imports could increase substantially without reaching the levels of the late 1970's.

Production was the principal supply component during the five heating seasons from 1978 to 1983; stock withdrawals ranked second. For all of 1982, refinery production was 98 percent of U.S. supply, stock withdrawals accounted for slightly more than 1 percent, and net imports, accounted for less than 1 percent. In 1978, production accounted for 92 percent of supply, stock withdrawal for 3 percent, and net imports accounted for 5 percent of the product supplied.

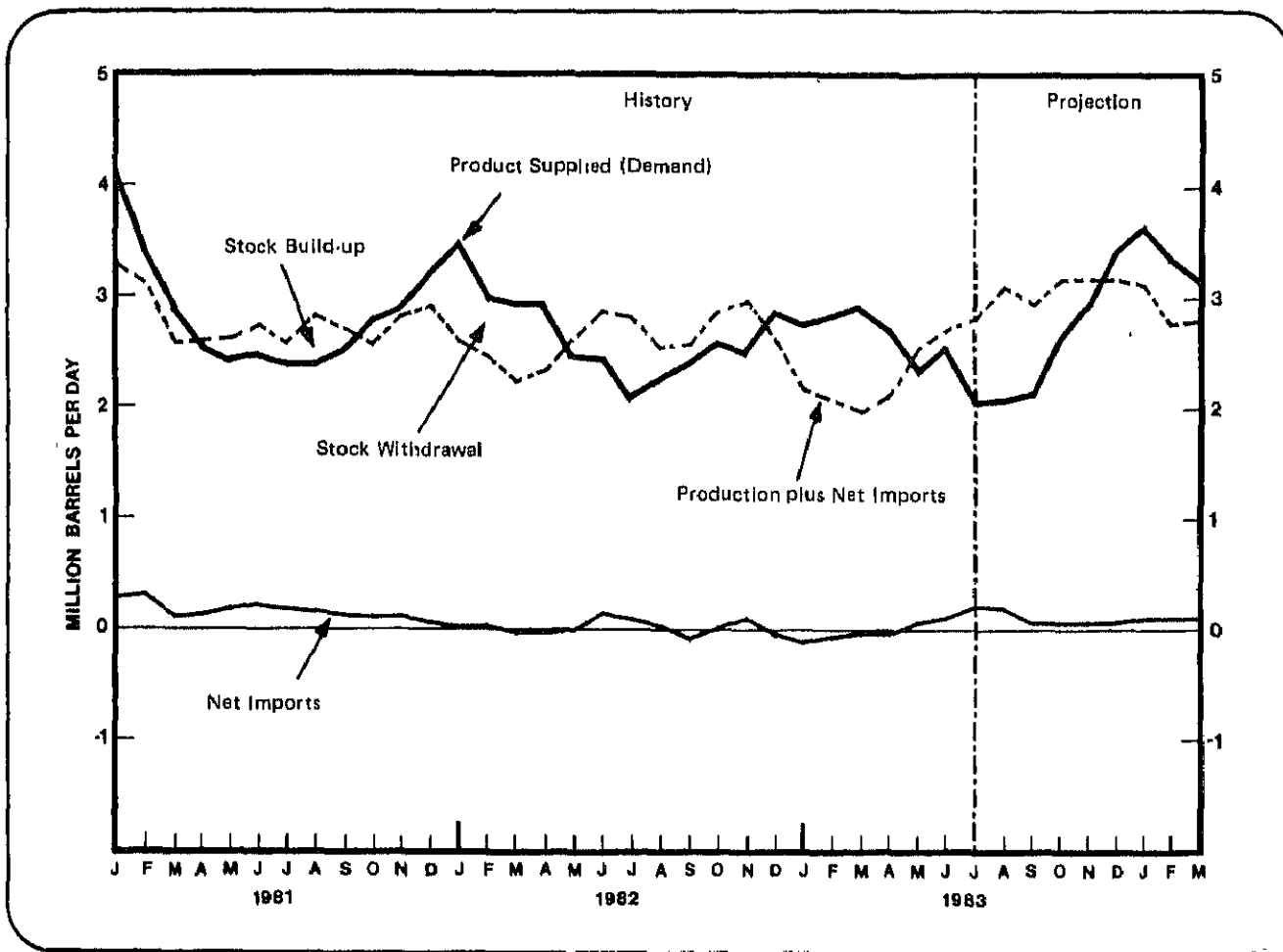
Primary stocks building generally begins during the summer months, when it is common to divert 15 to 20 percent of the distillate production to this purpose. Stocks build-up continues through the fall in anticipation of the December through February maximum con-

sumption period. This maximum consumption period is also the period when distillate imports usually peak. Maximum refinery production usually takes place during the October through March heating season.

Petroleum Administration for Defense (PAD) District I (East Coast) was the region of entry for 87 percent of U.S. imports of distillate fuel oil in 1982. However, the region received most of its 1982 supply from PAD District III. Because of the high winter levels of demand in PAD District I and its limited ability to produce distillate, stock levels in the region are higher and more variable than in other regions (see Table 1). Usually, when stock levels are at their highest, almost 50 percent of U.S. distillate inventories are located in PAD District I.

Other regions produce higher proportions of their local supply requirements. PAD District II (Midwest) produced 83 percent of its supply requirements in 1982.

Figure 2. Distillate Fuel Oil Supply and Demand: January 1981-March 1984



Source: Energy Information Administration, "Petroleum Supply Monthly" and "Short-Term Energy Outlook".

Table 1. Distillate Supply by Region, 1982
(Million Barrels)

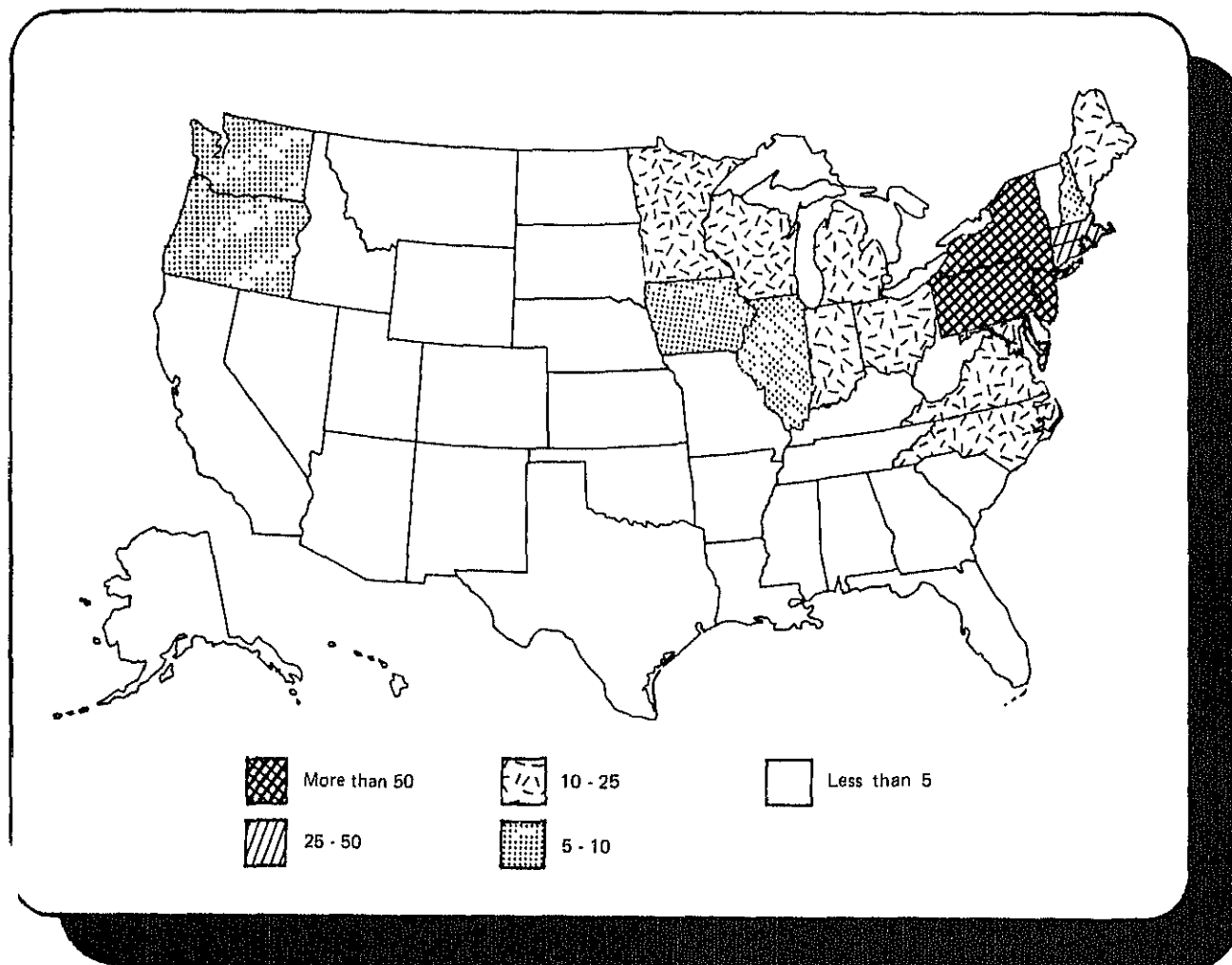
	Production	Imports	Stock Change	Net Receipts	Exports	Product Supplied
PADD I	105	30	7	215	1	356
PADD II	239	(s)	3	47	(s)	289
PADD III	447	2	1	- 266	15	170
PADD IV	41	(s)	(s)	- 4	(s)	37
PADD V	119	2	2	7	11	123
U.S. Total	951	34	13	(na)	27	975

(s) Less than 0.5 million barrels

(s)	Less than 0.5 m
(na)	Not applicable.

Source: Energy Information Administration, *Petroleum Supply Annual*, 1982.

Figure 3. Distillate Fuel Oil Consumption in the Residential Sector, 1982
(Thousand Barrels per Day)



Source: Energy Information Administration, "Petroleum Supply Annual."

PAD District III (the Gulf Coast) produced almost three times its 1982 requirements. PAD Districts IV (Rocky Mountains) and V (West Coast) were self sufficient.

Consumption Trends

Transportation is the largest end use sector for distillate fuel oil. Between 1978 and 1982, use in this sector grew from about a third to over half of the distillate product supplied. Use for electricity generation has declined each year since 1977, and the trend continues downward. Industrial use was depressed throughout 1982 and accounted for only 10 percent of the distillate product supplied, but is expected to improve during 1983. Commercial and residential consumption combined has declined each year since 1977. Of all end use sectors, the residential sector, which accounted for nearly one-fifth of the 1982 consumption, shows the maximum seasonal variation. This variation results primarily from the use of distillate as a heat source during the colder months.

Petroleum Administration for Defense (PAD) District I (East Coast) maintained the largest share, 37 percent of the total U.S. demand for distillate fuels, during 1982. This area is the primary market for distillate heating oil for residential heating (see Figure 3). Last year PAD District I accounted for 75 percent of total U.S. distillate consumed for residential heating. Thirty-eight percent of the region's consumption was used for residential heating. The region's second largest use for distillate was transportation.

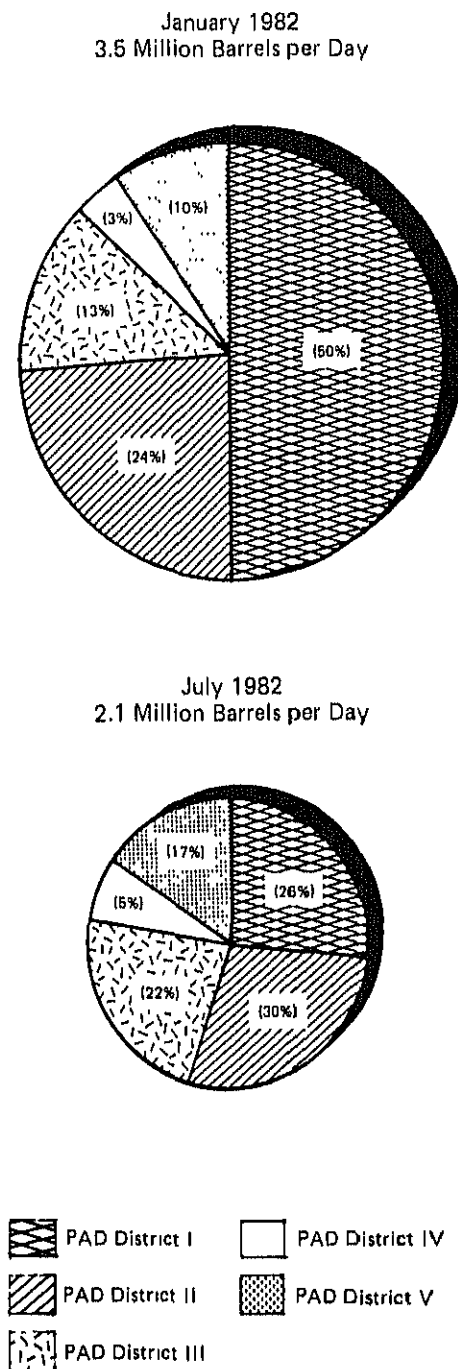
PAD District II, the second largest consuming region, accounted for 30 percent of U.S. distillate fuel oil consumed during 1982. Fifty-five percent of the region's consumption was used for transportation purposes, and only 13 percent was used for residential heating.

In January 1982, these two regions accounted for 74 percent of total U.S. demand for distillate. In July of 1982, however, they accounted for only 56 percent (see Figure 4). Customarily, PAD District I demand peaks sharply during the winter heating season while PAD District II demand shows less seasonality because of the greater importance of transportation and agricultural uses in that region. Nationwide, seasonal consumption variability is diminishing. In 1978, January consumption was 77 percent greater than July's. The gap has progressively narrowed, and this year January distillate consumption was only 21 percent greater than July's.

Residual Fuel Oil Trends

Residual fuel oil consumption peaked in 1977, at 3.1 MMBD. It has dropped each subsequent year, to 1.7 MMBD in 1982, its lowest level since 1965. A major part of this decline is explained by sizable price increases between 1978 and 1981. However, residual fuel oil demand continued to fall in 1982 and the first half of 1983, even as the price of residual fuel oil fell from 1981 levels, in both real and nominal terms. This continued decline in demand is largely attributed to greater reliance

Figure 4. Seasonal Variations in U.S. Distillate Oil Demand



Source: Energy Information Administration, "Petroleum Supply Monthly."

on coal, natural gas, hydropower, and nuclear facilities for electricity generation, the leading use for residual fuel oil.

This use accounted for 36 percent of all residual fuel oil deliveries in 1982. PAD District I (East Coast) accounted for over half of the total U.S. residual fuel oil delivered to electric utilities in 1982.

Other major consumers were industrial and oil companies, vessels and railroads. The recent weakness in the economy has affected all the uses of residual fuel oil. Although deliveries to most users declined each year between 1977 and 1982, the relative importance of different uses changed little. Vessels bunkering and railroads, the only category with any increase in consumption since 1977, grew from 129 million barrels in 1977 to 153 million barrels in 1982.

Deliveries of residual fuel oil for electric utility use totaled 227 million barrels in 1982, 98 million barrels less than the 1981 amount. Electric utilities accounted for 72 percent of the 1-year drop in total residual fuel oil use. The reductions in utility consumption in two states, California and Florida, of 27 and 22.5 million barrels, respectively, accounted for much of this change.

Demand Outlook

Recovery in demand is expected during the second half of 1983. A winter rebound to 1.8 million barrels per day is projected for the winter of 1983-84, a 12-percent increase over last winter's rate. Both economic recovery and normal weather are expected to contribute to the increase; however, an increase in electricity generation and a narrowing of the price differential between natural gas and residual fuel oil to electric utilities could result in a substantial increase in utilities' demand for residual fuel.

Sources of Supply

Residual fuel oil is supplied from production, net imports, and stock withdrawals. Production accounted for only about 62 percent of supply in 1982. Stocks supplied an additional 5 percent. Net imports accounted for 33 percent, the highest percentage for any finished petroleum product but less than the percentages experienced early in the 1970's. About 70 percent of 1982 imports came from Venezuela, Netherlands Antilles, the Virgin Islands, and Algeria. Following the relaxing of export regulations in 1981, exports have risen to record levels, reaching 229,000 barrels per day in the first half of 1983. Four destinations, (the Netherlands, Korea, Bahamas, and Singapore), accounted for about half of these exports. Current stock levels reflect the low demand for residual fuel oil. However, domestic production is projected to increase in response to rising demand and no difficulty is anticipated in meeting winter demand from traditional supply sources.

U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves

As of December 31, 1982, U.S. proved reserves were estimated to be 27.9 billion barrels of crude oil, 7.2 billion barrels of natural gas liquids (including lease condensate), and 202 trillion cubic feet of dry natural gas (excluding gas in underground storage). Crude oil reserves decreased 5.3 percent and natural gas reserves declined 0.1 percent while natural gas liquids reserves increased 2.2 percent (see Table 1).

The net decline of 1.6 billion barrels of crude oil reserves resulted in the lowest level of reserves since 1952. Proved crude oil reserves have decreased each year from the peak level of 39 billion barrels in 1970, when estimates for Prudhoe Bay field in Alaska were included for the first time. The average rate of yearly decline prevalent during the 1970's slowed during 1980 and 1981, but resumed in 1982. Total discoveries added 1.0 billion barrels of reserves during 1982. About three-fifths of the additions were from extensions to reservoirs found in prior years, and the remainder were from new field and new reservoir discoveries.

Proved reserves of dry natural gas decreased about 0.2 trillion cubic feet during 1982. Even so, reserves were about 1 percent above the recent minimum level in

1980. Of the 14.5 trillion cubic feet of gas reserves added during 1982, about three-fifths were from extensions to reservoirs found in prior years, and the remainder were new field and new reservoir discoveries.

Reserves of natural gas liquids increased for the third consecutive year to 7.2 billion barrels. This is the highest level since 1971. Although there were smaller reserve additions from discoveries (0.6 billion barrels) during 1982 than in the previous year, revisions to previous estimates and adjustments contributed to the net increase in reserves.

The estimates of proved reserves are based upon an analysis of data filed by 2,722 operators of oil and gas wells and by 971 operators of natural gas processing plants. The crude oil and natural gas proved reserves estimates are associated with sampling errors of less than 0.9 percent at a 95-percent confidence level.

The full report "U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1982 Annual Report" will be released by the Energy Information Administration in October 1983.

Table 1. Estimated Total U.S. Proved Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas

	Proved Reserves at Start of Year	Net Revisions ¹	Total Discoveries	Production	Proved Reserves at End of Year ²	Percent Change
Crude Oil (Million Barrels)						
1977	33,502 ³	346	794	2,862	31,780	- 5.1
1978	31,780	1,756	827	3,008	31,355	- 1.3
1979	31,355	774	636	2,955	29,810	- 4.9
1980	29,810	2,108	862	2,975	29,805	(s)
1981	29,805	1,409	1,161	2,949	29,426	- 1.3
1982	29,426	351	1,031	2,950	27,858	- 5.3
Natural Gas Liquids (Million Barrels)⁴						
1979	6,772 ³	15	555	727	6,615	- 2.3
1980	6,615	257	587	731	6,728	+ 1.7
1981	6,728	317	764	741	7,068	+ 5.1
1982	7,068	278	596	721	7,221	+ 2.2
Natural Gas (Billion Cubic Feet)⁵						
1977	213,278 ³	- 1,625	14,603	18,483	207,413	- 2.8
1978	207,413	1,404	18,021	18,805	208,033	+ 0.3
1979	208,033	- 2,483	14,704	19,257	200,997	- 3.4
1980	200,997	2,250	14,473	18,699	199,021	- 1.0
1981	199,021	4,226	17,220	18,737	201,730	+ 1.4
1982	201,730	2,833	14,455	17,506	201,512	- 0.1

¹Algebraic sum of revision increases, revision decreases, and net of corrections and adjustments.

²Proved reserves at end of year equal proved reserves at start of year, plus net revisions (including corrections and adjustments), plus total discoveries, minus production.

³Based on following year data only.

⁴Including lease condensate.

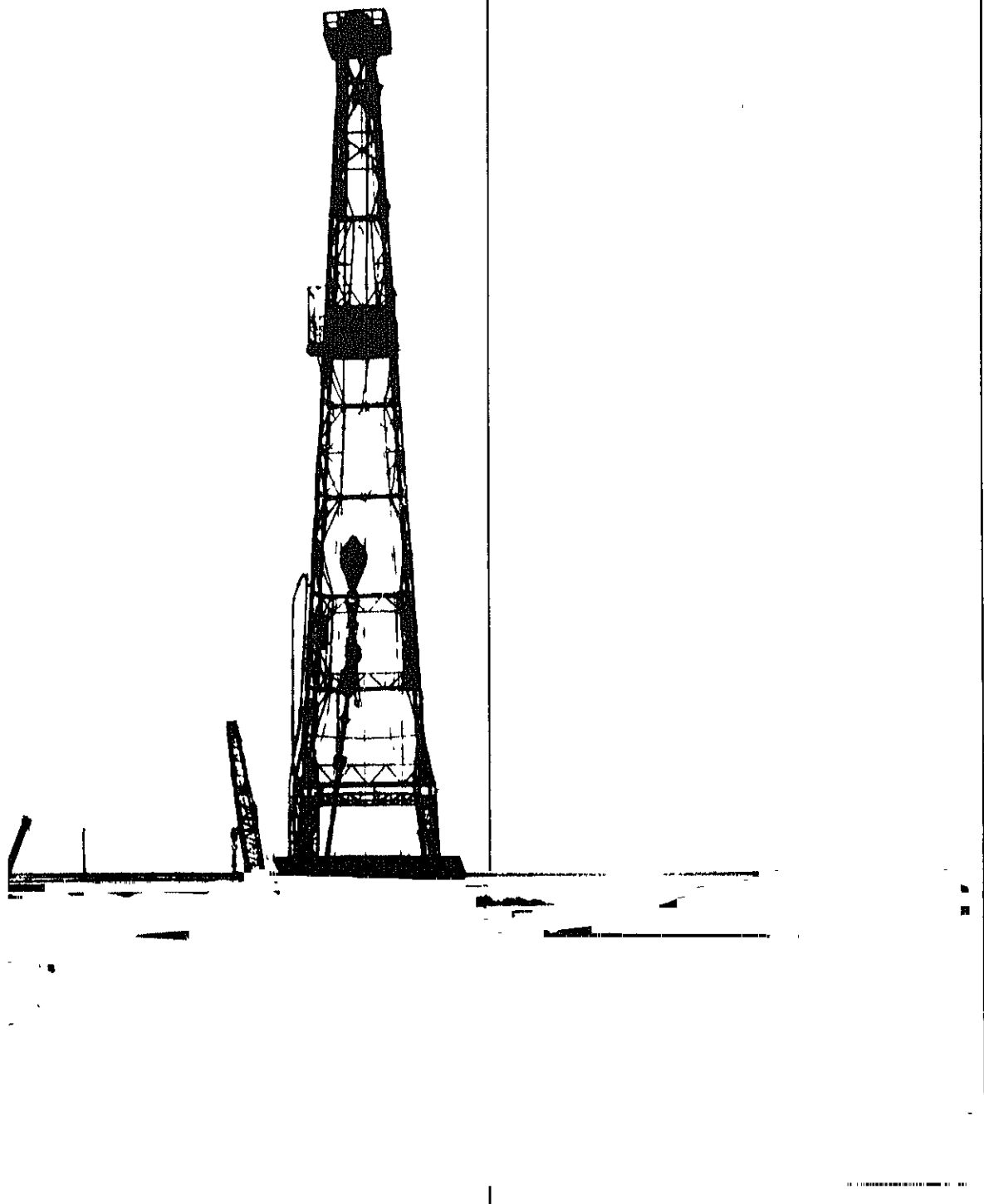
⁵Dry natural gas excluding gas in underground storage.

(s) Less than 0.05 percent.

Source: Energy Information Administration, "U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1982 Annual Report", "Advance Summary, August 31, 1983."

Note: Production figures are on oil reservoir and gas reservoir bases to maintain a balance in reserve accounting. These figures differ from those shown for production in the "Petroleum Supply Annual" and other EIA publications.

Summary Statistics



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²			Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
Thousand Barrels per Day								Millions of Barrels
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	⁶ 1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	⁶ 1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982	January	10,128	8,509	1,578	-401	1,298	16,124	1,456
	February	10,312	8,702	1,563	-242	1,230	16,001	1,428
	March	10,284	8,667	1,572	121	1,047	15,560	1,392
	April	10,188	8,591	1,542	-37	1,583	16,046	1,346
	May	10,244	8,683	1,518	29	-66	14,847	1,347
	June	10,212	8,646	1,511	40	-489	14,998	1,360
	July	10,229	8,658	1,513	-147	-926	14,821	1,393
	August	10,215	8,634	1,524	-440	-44	14,839	1,408
	September	10,279	8,701	1,518	263	-447	15,022	1,414
	October	10,299	8,701	1,530	-548	-47	14,859	1,432
	November	10,359	8,697	1,609	-398	-361	15,009	1,455
	December	10,276	8,598	1,628	128	688	15,487	⁶ 1,430
	AVERAGE	10,252	8,649	1,550	-136	283	15,296	
1983	January	10,356	8,634	1,668	-567	865	14,765	1,453
	February	10,298	8,660	1,585	-382	1,128	14,772	1,432
	March	10,259	8,677	1,544	56	1,765	15,484	1,375
	April	10,229	8,686	1,502	-438	431	14,779	1,376
	May	10,231	8,682	1,483	68	-759	14,250	1,397
	June	10,262	8,676	1,514	-163	-242	15,281	1,409
	July*	10,237	8,647	1,536	R 118	R -922	R 14,913	R 1,434
	August**	NA	8,653	NA	-453	-432	15,175	1,458
	AVERAGE	NA	8,664	NA	-217	219	14,928	

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Stocks are totals as of end of period.

⁴ Includes natural gas plant production, other hydrocarbons and alcohol.

⁵ Includes stocks held in the Strategic Petroleum Reserve.

⁶ 1981, and 1983, significant numbers of new respondents were added to bulk surveys as a result of extensive investigation during the previous years.

⁷ Based on the reporting of stocks and stock withdrawals. Using the expanded end of year stocks would be: 1974-1,121, 1980-1,420 and 1982-1,462.

⁸ 1975, 1981 and 1983 are calculated using new basis stock levels.

⁹ of components due to independent rounding.

R = Revised data.

1.

for data. See Explanatory Note 8.

50 United States and the District of Columbia.

the end of this section.

Crude Oil¹ and Petroleum Products Overview (continued)

		Imports			Exports				
		Total	Crude Oil ²	Petroleum Products	Total	Crude Oil	Petroleum Products		Net ³ Imports
Thousand Barrels per Day									
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025	
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892	
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846	
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090	
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565	
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002	
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984	
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365	
1981	January	6,827	4,932	1,895	558	339	219	6,270	
	February	6,772	4,873	1,899	569	198	371	6,203	
	March	6,028	4,521	1,507	586	210	376	5,442	
	April	5,668	4,338	1,330	570	198	372	5,098	
	May	5,775	4,287	1,489	595	312	283	5,180	
	June	5,435	4,061	1,375	420	123	297	5,015	
	July	5,816	4,296	1,521	571	257	314	5,245	
	August	5,767	4,179	1,588	644	204	440	5,123	
	September	6,365	4,740	1,624	519	194	325	5,845	
	October	5,959	4,380	1,579	738	226	512	5,221	
	November	5,741	4,046	1,695	701	278	423	5,041	
	December	5,843	4,137	1,706	656	189	467	5,187	
	AVERAGE	5,996	4,396	1,599	595	228	367	5,401	
1982	January	5,332	3,693	1,639	829	238	591	4,503	
	February	4,807	2,990	1,817	804	304	499	4,003	
	March	4,484	2,874	1,610	882	321	561	3,602	
	April	4,378	2,849	1,529	786	174	611	3,593	
	May	4,811	3,309	1,503	803	262	542	4,008	
	June	5,327	3,836	1,491	703	94	609	4,624	
	July	5,890	4,248	1,642	741	229	512	5,149	
	August	5,244	3,851	1,392	858	304	554	4,386	
	September	5,414	3,636	1,778	791	184	606	4,624	
	October	5,306	3,670	1,636	932	270	662	4,374	
	November	5,744	3,862	1,882	786	262	524	4,958	
	December	4,606	3,000	1,605	860	193	667	3,746	
	AVERAGE	5,113	3,488	1,625	815	236	579	4,298	
1983	January	4,372	2,938	1,434	973	117	856	3,399	
	February	3,691	2,268	1,423	865	262	603	2,825	
	March	3,629	2,232	1,398	801	174	627	2,829	
	April	4,744	3,154	1,590	809	88	721	3,935	
	May	4,898	3,234	1,664	848	280	568	4,049	
	June	5,218	3,502	1,716	774	144	630	4,443	
	July*	R 5,690	R 3,868	R 1,822	571	145	426	5,119	
	August**	5,871	4,129	1,741	NA	NA	NA	NA	
	AVERAGE	4,776	3,175	1,600	NA	NA	NA	NA	

¹ Includes lease condensate.

² Includes crude oil for storage in the Strategic Petroleum Reserve.

³ Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

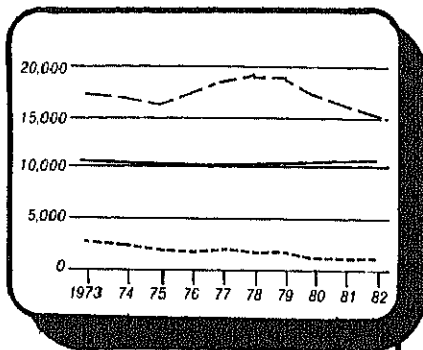
** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

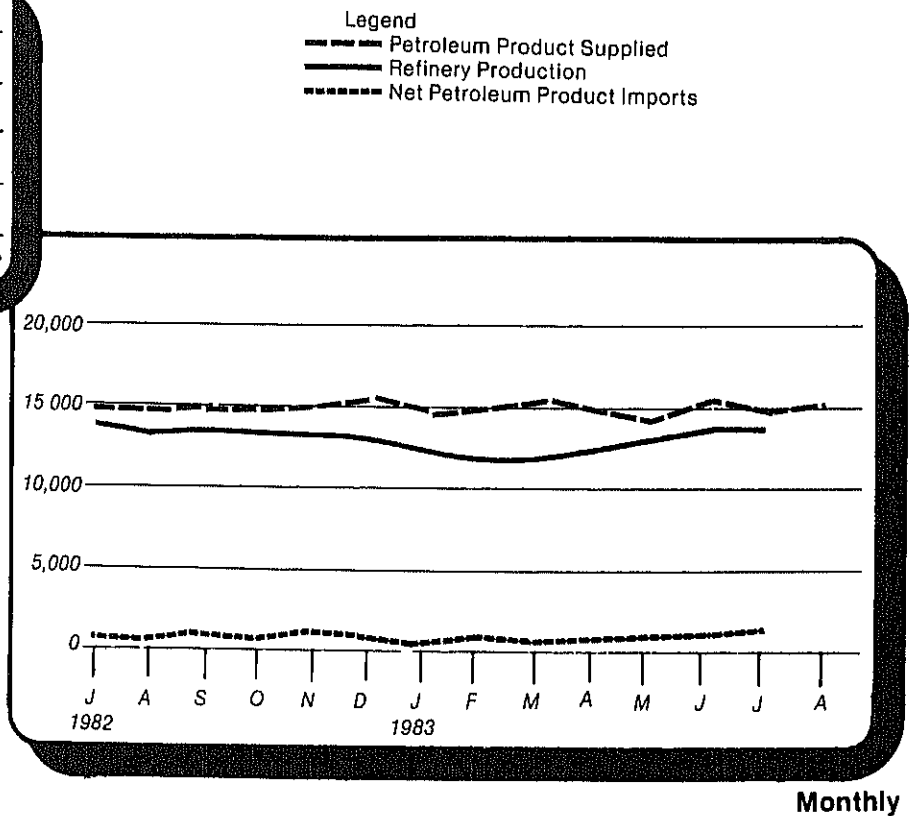
Sources: See "Sources" at the end of this section.

Petroleum Overview

(Thousand Barrels Per Day)



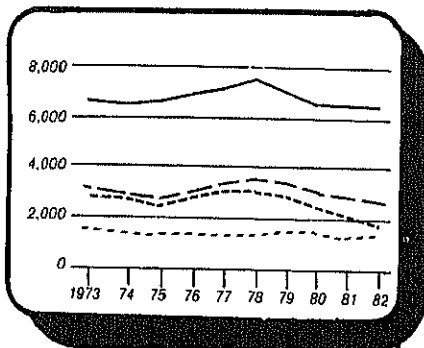
Annual



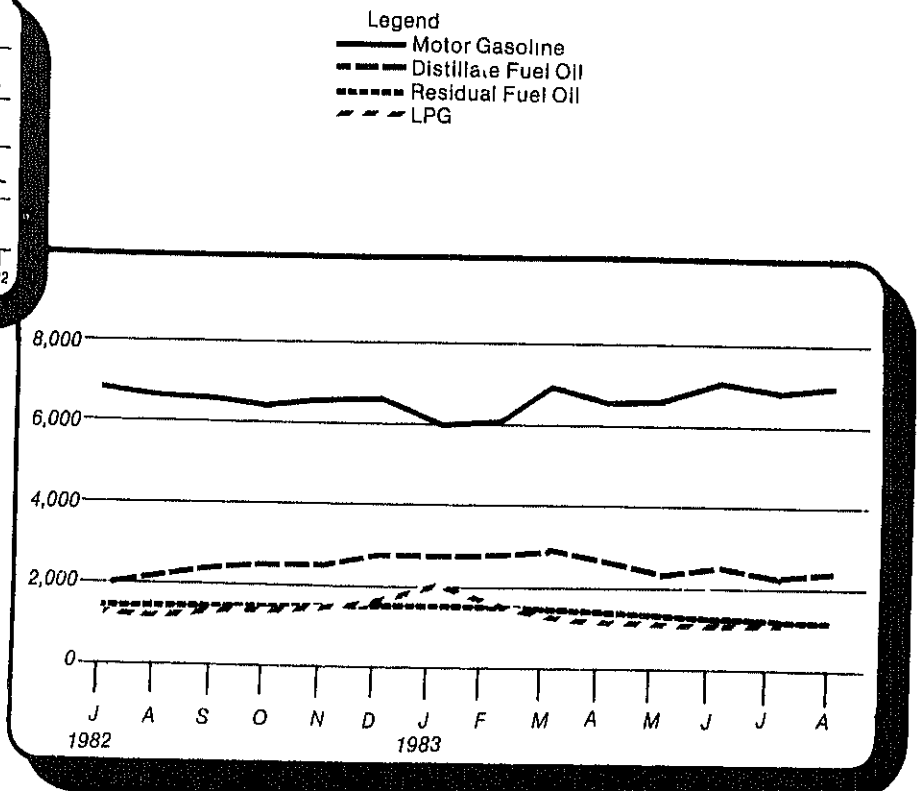
Monthly

Petroleum Products Supplied

(Thousand Barrels Per Day)



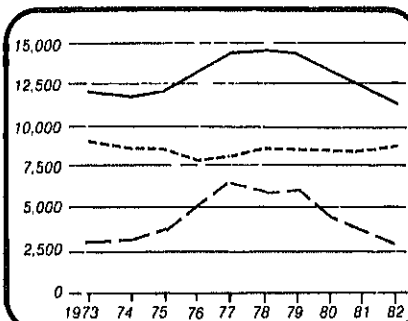
Annual



Monthly

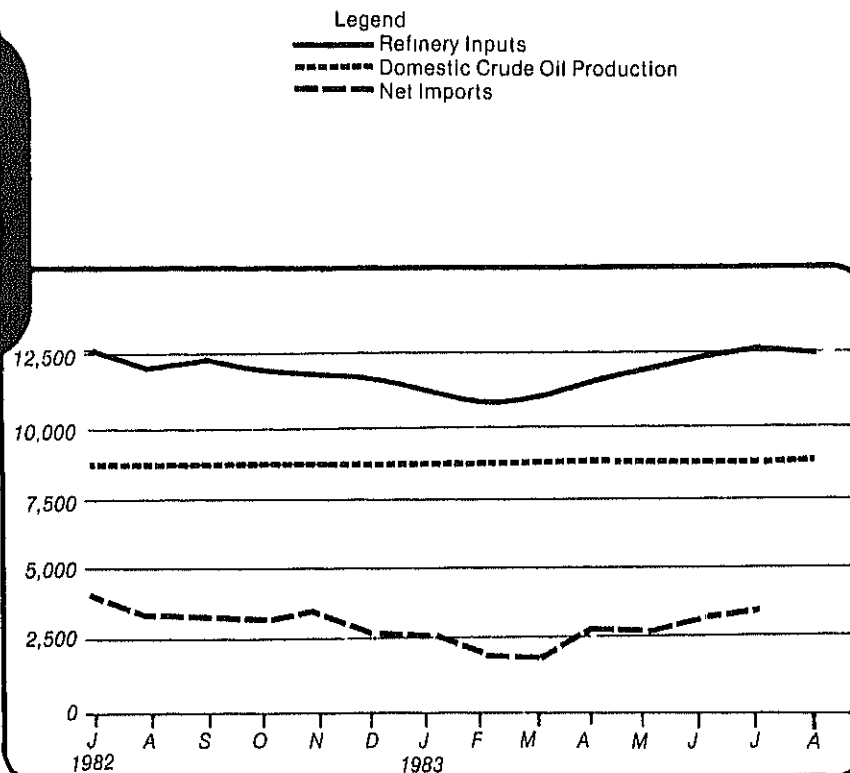
Crude Oil Supply and Disposition

(Thousand Barrels Per Day)



Annual

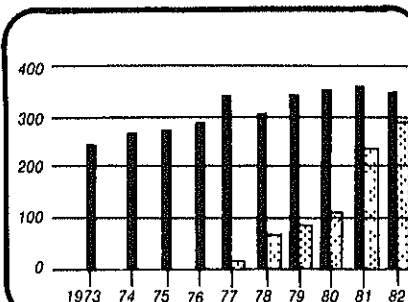
¹ Excludes SPR Imports



Monthly

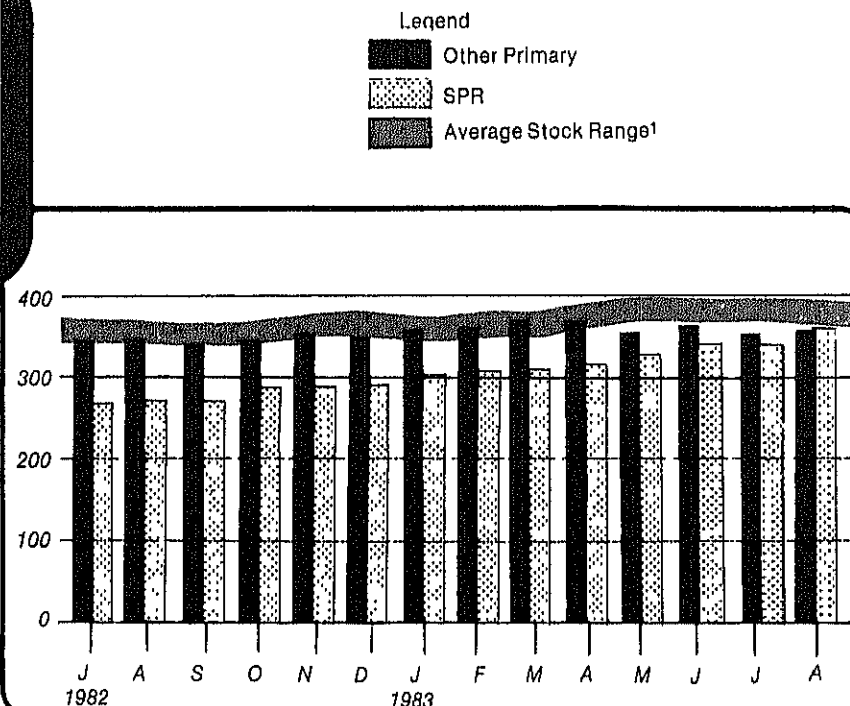
Crude Oil Ending Stocks

(Millions of Barrels)



Annual

¹ Level and width of Average Stock Ranges for crude oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



Monthly

Crude Oil¹ Supply and Disposition

		Supply						
		Field Production		Imports			Stock Withdrawal ²	
		Total Domestic	Alaskan	Total	SPR ³	Other	SPR ³	Other
		Thousand Barrels per Day						
								Unac- counted for Crude Oil
1973	AVERAGE	9,208	198	3,244		3,244	11	3
1974	AVERAGE	8,774	193	3,477		3,477	-62	-25
1975	AVERAGE	8,375	191	4,105		4,105	-17	17
1976	AVERAGE	8,132	173	5,287		5,287	-39	77
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-6
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	-57
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-11
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	34
1981	January	8,540	1,606	4,932	106	4,826	-151	113
	February	8,604	1,619	4,873	80	4,793	-127	-41
	March	8,613	1,618	4,521	140	4,382	-155	154
	April	8,557	1,608	4,338	272	4,066	-444	51
	May	8,501	1,580	4,287	386	3,901	-513	266
	June	8,629	1,632	4,061	318	3,743	-434	49
	July	8,500	1,605	4,296	175	4,121	-324	147
	August	8,583	1,602	4,179	257	3,922	-372	16
	September	8,604	1,607	4,740	435	4,305	-486	-295
	October	8,563	1,596	4,380	453	3,927	-501	166
	November	8,586	1,614	4,046	271	3,774	-259	279
	December	8,585	1,623	4,137	165	3,971	-252	52
	AVERAGE	8,572	1,609	4,396	256	4,141	-336	83
1982	January	8,509	1,705	3,693	170	3,523	-159	101
	February	8,702	1,707	2,990	159	2,830	-213	156
	March	8,667	1,696	2,874	185	2,689	-235	2
	April	8,591	1,691	2,849	190	2,659	-233	231
	May	8,683	1,707	3,309	204	3,105	-176	111
	June	8,646	1,665	3,836	105	3,732	-105	133
	July	8,658	1,710	4,248	97	4,150	-97	-20
	August	8,634	1,697	3,851	208	3,643	-208	189
	September	8,701	1,705	3,636	139	3,497	-143	-210
	October	8,701	1,706	3,670	216	3,454	-216	249
	November	8,697	1,676	3,862	180	3,683	-179	-124
	December	8,598	1,682	3,000	124	2,877	-125	35
	AVERAGE	8,649	1,696	3,488	165	3,323	-174	71
1983	January	8,634	1,698	2,938	219	2,720	-219	238
	February	8,660	1,725	2,268	197	2,071	-197	423
	March	8,677	1,726	2,232	201	2,031	-184	134
	April	8,686	1,710	3,154	205	2,949	-197	191
	May	8,682	1,710	3,234	289	2,945	-293	148
	June	8,676	1,710	3,502	190	3,312	-188	480
	July*	8,647	1,705	R 3,868	R 274	R 3,594	R -264	R 382
	August**	8,653	1,712	4,129	330	3,799	-344	-110
	AVERAGE	8,664	1,712	3,175	239	2,936	-237	19

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition (continued)

		Supply	Disposition				Ending Stocks ²		
		Crude Used Directly ³	Crude Losses	Refinery Inputs	Exports	Product Supplied ³	Total Crude Oil	SPR ⁴	Other Primary
		Thousand Barrels per Day					Millions of Barrels		
1973	AVERAGE	-19	13	12,431	2	NA	242		242
1974	AVERAGE	-15	13	12,133	3	NA	⁵ 265		⁵ 265
1975	AVERAGE	-17	13	12,442	6	NA	271		271
1976	AVERAGE	-18	15	13,416	8	NA	285		285
1977	AVERAGE	-14	16	14,602	50	NA	348	7	340
1978	AVERAGE	-14	16	14,739	158	NA	376	67	309
1979	AVERAGE	-13	16	14,648	235	NA	430	91	339
1980	AVERAGE	-13	15	13,481	287	NA	⁵ 466	108	⁵ 358
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	-58	5	12,470	228	NA			
1982	January	-63	3	11,599	238	NA	606	235	371
	February	-64	2	11,236	304	NA	613	241	372
	March	-63	5	11,276	321	NA	609	249	361
	April	-65	3	11,392	174	NA	610	256	355
	May	-62	3	11,806	262	NA	609	261	348
	June	-60	7	12,494	94	NA	608	264	344
	July	-60	3	12,446	229	NA	613	267	346
	August	-57	2	11,871	304	NA	626	274	353
	September	-56	4	12,146	184	NA	619	278	341
	October	-51	2	11,749	270	NA	636	285	351
	November	-51	1	11,724	262	NA	648	290	358
	December	-53	1	11,514	193	NA	⁵ 644	294	⁵ 350
	AVERAGE	-59	3	11,774	236	NA			
1983	January	NA	2	11,070	117	54	661	301	361
	February	NA	3	10,635	262	69	672	306	366
	March	NA	2	10,854	174	70	670	312	359
	April	NA	2	11,436	88	68	684	318	366
	May	NA	1	11,789	280	63	681	327	355
	June	NA	1	12,287	144	64	686	332	354
	July*	NA	2	R 12,347	145	65	R 683	341	R 342
	August**	NA	NA	12,251	NA	NA	702	351	350
	AVERAGE	NA	NA	11,593	NA	NA			

¹ Includes lease condensate.

² Stocks are totals as of end of period.

³ Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.

⁴ Strategic Petroleum Reserve.

⁵ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis) end of year stocks would be: 1974-265, 1980-483 (Total) and 375 (Other primary), and 1982-644 (Total) and 350 (Other Primary).

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks ¹	
		Total Produc- tion	Imports ²	Stock With- drawal ^{2 3}	Exports	Product Supplied			Total Motor Gasoline ⁴	Finished Motor Gasoline
						Total	Unleaded ⁵	Unleaded		
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	⁶ 218	
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235	
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979	AVERAGE	6,852	181	2	(⁶)	7,034	2,798	39.8	237	
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	⁶ 261	
1981	January	6,715	138	-421	(⁶)	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	(⁶)	6,303	3,097	49.1	285	232
	April	6,114	186	303	(⁶)	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	(⁶)	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
	AVERAGE	6,405	157	28	2	6,588	3,264	49.5		
1982	January	6,167	128	-316	18	5,961	3,067	51.5	261	213
	February	5,899	133	172	8	6,196	3,210	51.8	257	208
	March	5,994	183	334	44	6,466	3,358	51.9	247	198
	April	6,095	185	650	33	6,897	3,495	50.7	221	179
	May	6,319	182	177	23	6,655	3,415	51.3	214	173
	June	6,754	230	-134	14	6,835	3,565	52.2	219	177
	July	6,768	225	-178	24	6,790	3,577	52.7	226	183
	August	6,419	291	-81	16	6,614	3,526	53.3	227	185
	September	6,527	223	-198	22	6,531	3,404	52.1	234	191
	October	6,262	185	-42	15	6,391	3,351	52.4	234	192
	November	6,273	211	101	11	6,574	3,451	52.5	230	189
	December	6,542	178	-165	7	6,549	3,485	53.2	⁶ 235	⁶ 194
	AVERAGE	6,338	197	25	20	6,539	3,409	52.1		
1983	January	6,020	148	-186	(⁶)	5,981	3,352	56.0	251	208
	February	5,848	142	32	(⁶)	6,022	3,257	54.1	251	207
	March	5,897	205	765	23	6,843	3,620	52.9	224	184
	April	6,202	273	27	1	6,501	3,505	53.9	221	183
	May	6,386	284	-128	1	6,540	3,547	54.2	225	187
	June	6,646	265	118	22	7,008	3,796	54.2	223	183
	July*	R 6,704	R 297	R -210	18	R 6,773	3,752	55.4	R 231	190
	August**	6,559	238	181	NA	6,968	NA	NA	223	184
	AVERAGE	6,287	232	75	NA	6,585	NA	NA		

¹ Stocks are totals as of end of period.

² Beginning in 1981, excludes blending components.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Includes motor gasoline blending components.

⁵ Includes gasohol.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-225, 1980-263, 1982-244 (Total) and 203 (Finished). Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(⁶) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 9.3.

** Italics denote preliminary data. See Explanatory Note 8.

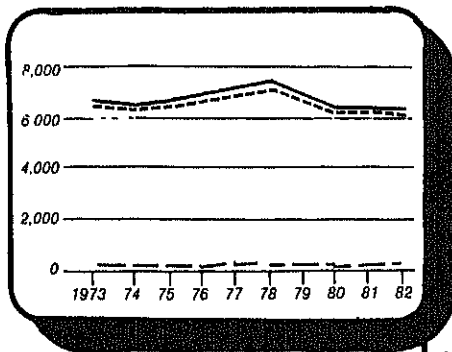
Note: Beginning in January 1981, survey forms were modified.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

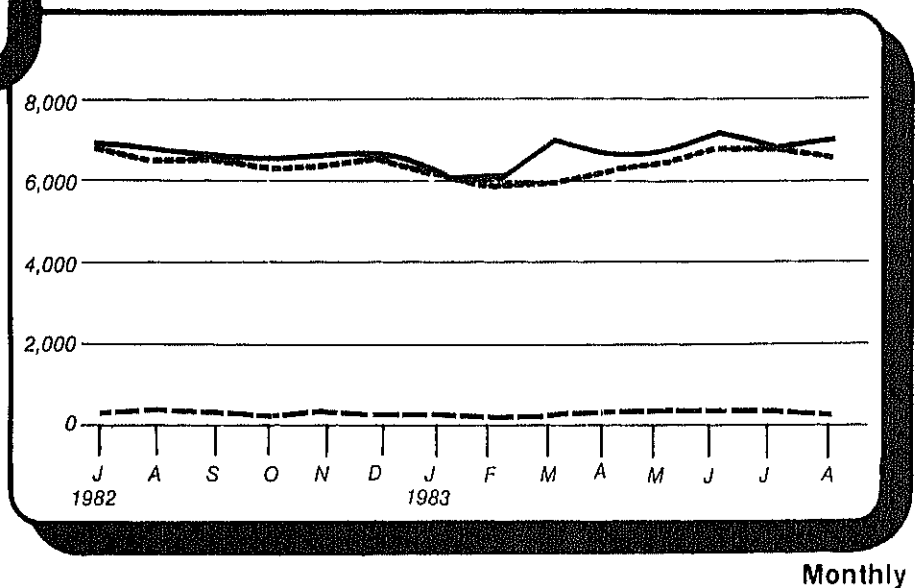
Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)



Annual

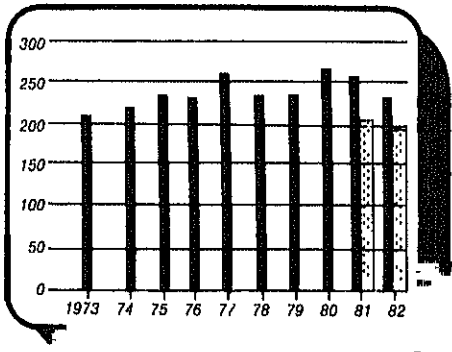
Legend
 — Product Supplied
 - - - Finished Gasoline Production
 . . . Finished Gasoline Imports



Monthly

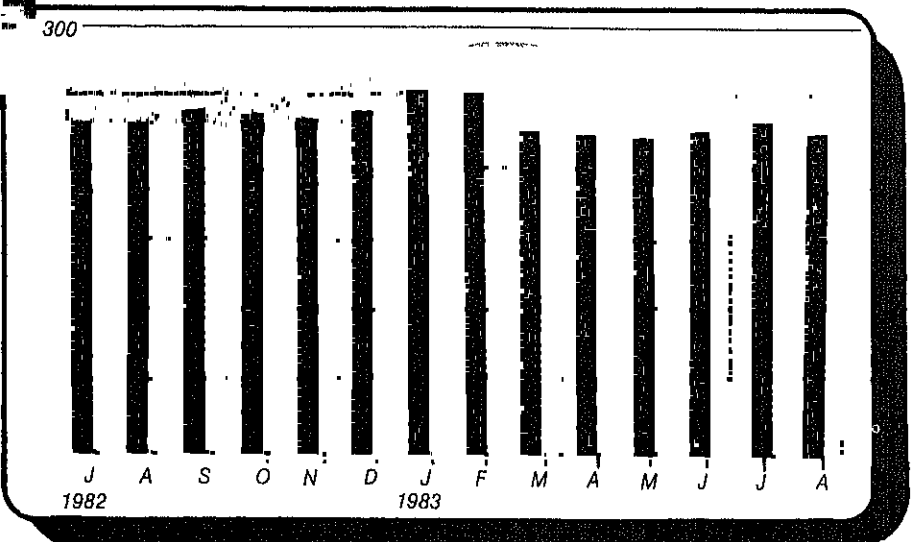
Motor Gasoline Ending Stocks

(Millions of Barrels)



Annual

Legend
 ■ Total Motor Gasoline¹
 □ Finished Motor Gasoline
 ▨ Average Stock Range²



Monthly

¹ Includes finished motor gasoline blending components

² Level and width of Average Stock Range for total motor gasoline based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	⁴ 200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	⁴ 205
1981	January	2,989	273	836	11	(⁵)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(⁵)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(⁵)	2,411	172
	June	2,501	225	-270	9	(⁵)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(⁵)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,591	97	876	10	90	3,484	164
	February	2,427	132	605	11	90	3,085	147
	March	2,288	48	682	10	84	2,945	126
	April	2,358	59	612	13	64	2,978	108
	May	2,618	74	-183	10	75	2,444	114
	June	2,729	102	-335	10	55	2,452	124
	July	2,734	125	-789	11	24	2,058	148
	August	2,507	80	-339	10	40	2,218	159
	September	2,657	61	-85	12	139	2,507	161
	October	2,838	91	-289	8	66	2,581	170
	November	2,860	145	-514	8	24	2,475	186
	December	2,655	109	225	10	143	2,855	⁴ 179
	AVERAGE	2,606	93	35	10	74	2,671	
1983	January	2,314	58	561	NA	173	2,760	168
	February	2,136	58	742	NA	105	2,832	147
	March	1,991	42	926	NA	59	2,900	119
	April	2,169	73	518	NA	47	2,713	103
	May	2,444	141	-193	NA	50	2,341	109
	June	2,545	175	-154	NA	40	2,526	114
	July*	R 2,600	R 259	R -556	NA	55	R 2,248	R 131
	August**	2,597	262	-387	NA	NA	2,426	142
	AVERAGE	2,352	134	175	NA	NA	2,590	

¹ Stocks are totals as of end of period.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-224, 1980-205, and 1982-186. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(⁵) = Less than 500 barrels per day. NA = Not available. R = Revised data.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

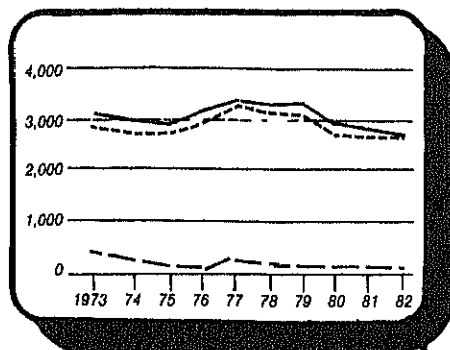
Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

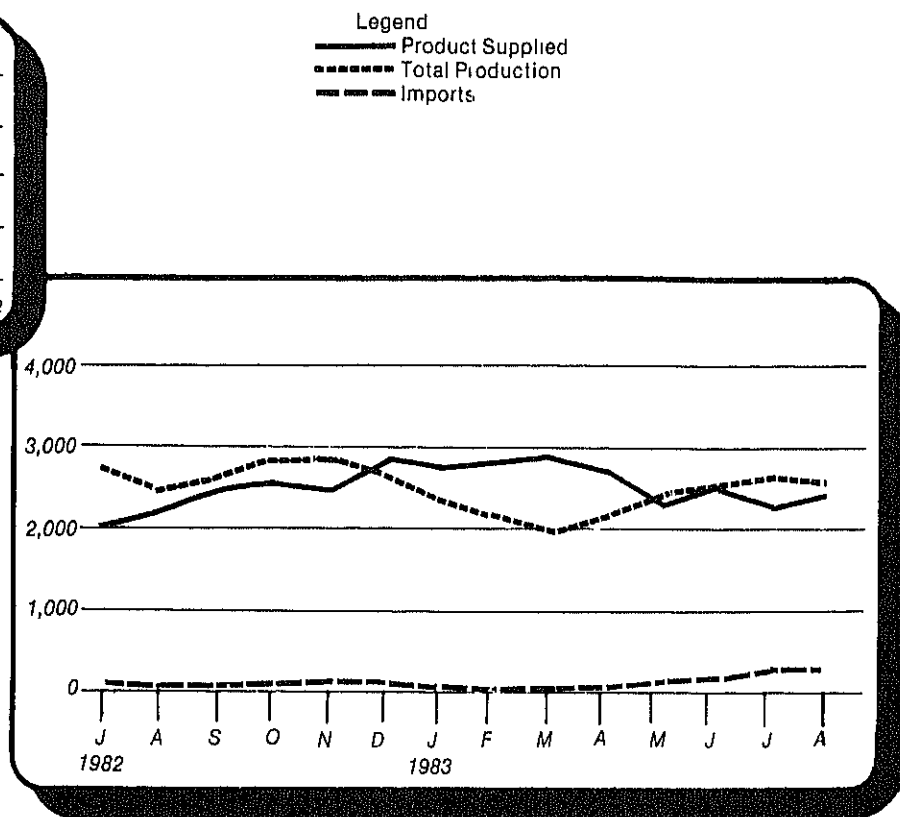
Sources: See "Sources" at the end of this section.

Distillate Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



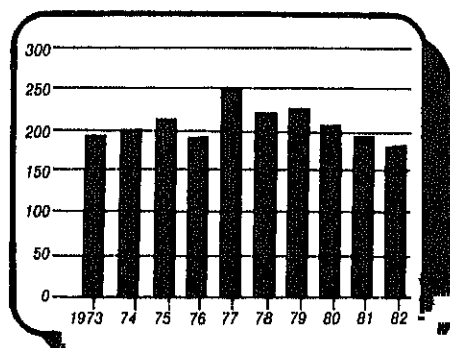
Annual



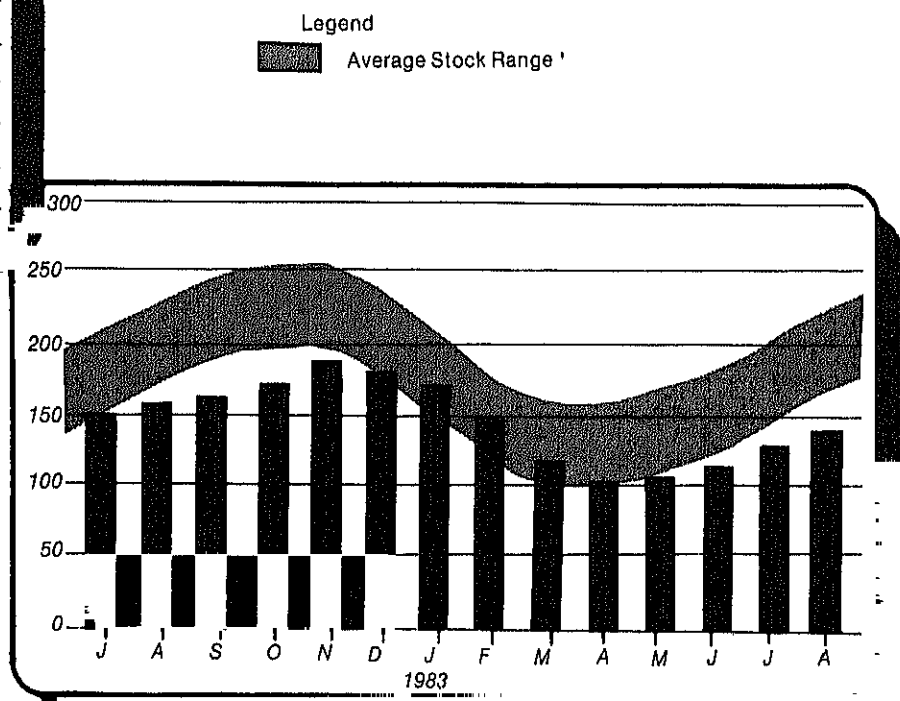
Monthly

Distillate Fuel Oil Ending Stocks

(Millions of Barrels)



Annual



' Level and width of Average Stock Range for distillate fuel oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	971	1,853	5	17	23	2,822	53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	⁴ 60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979	AVERAGE	1,687	1,151	-15	12	9	2,828	96
1980	AVERAGE	1,580	939	10	12	33	2,508	⁴ 92
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	1,321	800	37	48	118	2,088	
1982	January	1,235	831	301	53	235	2,185	69
	February	1,186	956	363	53	213	2,344	58
	March	1,123	912	12	53	197	1,903	58
	April	1,166	788	150	52	234	1,923	54
	May	1,128	742	-172	52	191	1,560	59
	June	1,074	652	-57	50	217	1,501	61
	July	1,028	657	56	49	239	1,550	59
	August	965	551	203	47	235	1,531	53
	September	1,008	872	-306	44	148	1,470	62
	October	955	783	-57	43	234	1,490	64
	November	989	837	-94	43	182	1,591	66
	December	989	747	6	43	186	1,598	⁴ 66
	AVERAGE	1,070	776	32	48	209	1,716	
1983	January	935	691	243	NA	294	1,574	61
	February	857	632	270	NA	191	1,568	53
	March	833	686	220	NA	169	1,569	46
	April	942	743	-10	NA	310	1,364	47
	May	930	709	-139	NA	190	1,310	51
	June	832	676	28	NA	219	1,317	50
	July*	R 771	R 682	R -58	NA	90	R 1,306	R 52
	August**	761	627	74	NA	NA	1,261	46
	AVERAGE	857	681	77	NA	NA	1,407	

¹ Stocks are totals as of end of period.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-75, 1980-91, and 1982-68. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Beginning in January 1981, survey forms were modified.

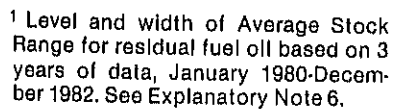
Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

(Thousand Barrels Per Day)



(Millions of Barrels)



Liquefied Petroleum Gases Supply and Disposition

		Supply			Disposition			Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	³ 113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	³ 120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,565	314	443	391	67	1,863	121
	February	1,466	291	243	327	51	1,621	114
	March	1,544	223	211	289	74	1,615	108
	April	1,506	188	98	257	77	1,458	105
	May	1,565	186	-71	234	43	1,403	107
	June	1,515	192	-86	262	106	1,254	109
	July	1,476	227	-13	253	37	1,399	110
	August	1,511	125	-45	254	61	1,276	111
	September	1,538	247	37	274	85	1,463	110
	October	1,517	194	97	306	81	1,421	107
	November	1,542	267	175	363	37	1,583	102
	December	1,580	258	256	395	56	1,642	³ 94
	AVERAGE	1,528	226	111	300	65	1,499	
1983	January	1,662	240	618	313	118	2,088	84
	February	1,560	305	84	237	76	1,636	81
	March	1,517	166	-51	189	127	1,316	83
	April	1,531	124	-107	198	116	1,232	86
	May	1,545	167	-326	207	84	1,094	96
	June	1,593	172	-333	205	59	1,169	106
	July*	1,571	191	-206	217	55	1,284	112
	AVERAGE	1,569	194	-46	224	91	1,401	

¹ Stocks are totals as of end of period.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-113, 1980-128, and 1982-103. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

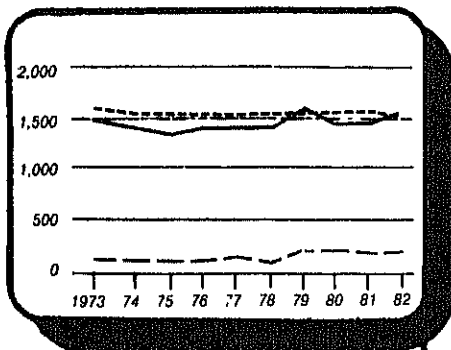
* See Explanatory Note 9.5.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

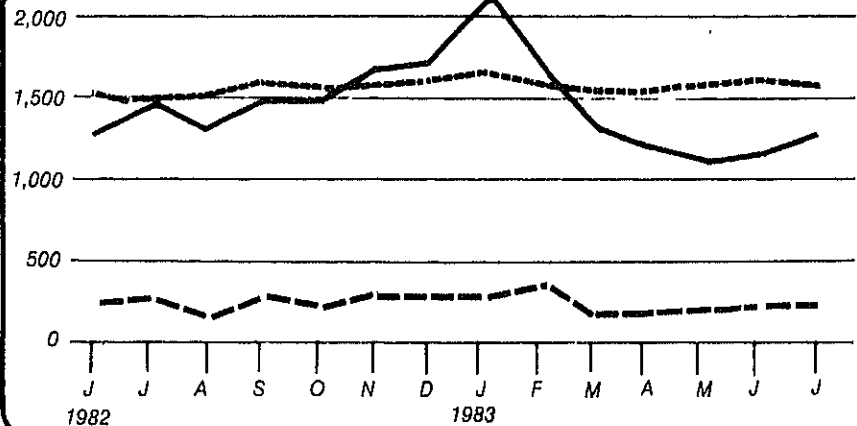
Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



Annual

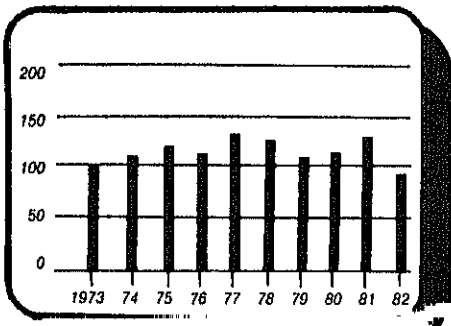
Legend
 — Product Supplied
 - - - Total Production
 . . . Imports



Monthly

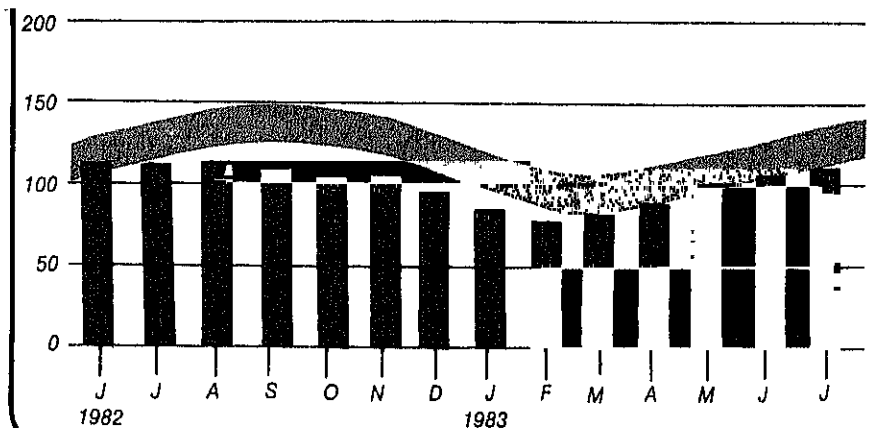
Liquefied Petroleum Gases Ending Stocks

(Millions of Barrels)



Annual

Legend
 [Shaded Area] Average Stock Range¹



¹ Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
Thousand Barrels per Day								Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	⁴ 218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	⁴ 247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,171	269	-7	624	180	2,631	282
	February	3,403	305	-153	663	138	2,755	287
	March	3,466	243	-191	725	161	2,631	293
	April	3,408	309	73	796	204	2,790	290
	May	3,317	318	184	824	210	2,785	285
	June	3,547	315	123	812	216	2,954	281
	July	3,660	408	-1	856	187	3,023	281
	August	3,583	346	217	743	202	3,201	274
	September	3,533	375	105	749	213	3,051	271
	October	3,529	383	244	915	266	2,976	264
	November	3,498	423	-28	837	269	2,786	264
	December	3,324	313	366	885	275	2,842	⁴ 253
	AVERAGE	3,453	334	80	787	211	2,869	
1983	January	3,222	297	-371	570	271	2,307	271
	February	3,270	287	-1	680	232	2,645	271
	March	3,400	298	-94	570	249	2,786	273
	April	3,363	377	3	596	247	2,901	273
	May	3,448	364	26	694	242	2,902	273
	June	3,674	427	99	715	292	3,197	270
	July*	3,703	393	106	757	209	3,237	266
	AVERAGE	3,442	349	-34	654	249	2,855	

¹ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

² Stocks are totals as of end of period.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-220, 1980-249, and 1982-259. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.6.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from OPEC Sources¹

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ²	Total OPEC	Total Arab OPEC ³
Thousand Barrels per Day											
1973											
AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	916
1974											
AVERAGE	190	4	481	74	300	469	713	979	88	3,280	752
1975											
AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976											
AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,086	2,424
1977											
AVERAGE	559	723	1,380	335	541	535	1,143	890	287	6,193	3,186
1978											
AVERAGE	649	654	1,144	385	573	555	919	845	226	5,751	2,963
1979											
AVERAGE	636	658	1,356	281	420	304	1,080	890	212	5,637	3,056
1980											
AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982											
January	254	161	877	111	289	0	663	376	128	2,859	1,403
February	139	92	693	89	244	0	584	355	102	2,297	1,054
March	91	37	555	155	200	0	522	399	91	2,051	860
April	85	0	511	122	215	0	427	426	85	1,871	740
May	179	0	601	116	236	0	222	422	54	1,830	897
June	115	0	593	94	215	72	537	361	110	2,096	820
July	159	0	660	108	327	69	910	356	95	2,885	965
August	181	0	489	133	271	27	574	299	133	2,107	818
September	179	0	432	57	191	21	477	518	69	1,943	677
October	249	7	494	61	242	108	313	504	106	2,084	810
November	247	14	489	47	283	34	479	528	115	2,235	797
December	155	0	237	12	265	88	462	399	73	1,690	421
AVERAGE	170	26	552	92	248	35	514	412	97	2,146	854
1983											
January	204	0	282	47	255	43	186	324	43	1,384	533
February	104	0	214	9	217	0	92	371	28	1,035	326
March	63	0	103	0	138	0	121	425	173	1,023	183
April	228	0	180	(*)	210	0	186	508	125	1,438	409
May	284	0	122	12	324	37	352	444	69	1,645	419
June	300	0	175	40	502	38	402	335	146	1,938	516
July	282	0	182	58	464	112	525	431	187	2,240	599
AVERAGE	210	0	179	24	302	33	266	406	111	1,534	427

¹ Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

³ Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

(*) Less than 500 barrels.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve Imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from Non-OPEC Sources¹

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico ²	Virgin Islands ²	Other	Total
Thousand Barrels per Day										
1973										
AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974										
AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975										
AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976										
AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977										
AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978										
AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979										
AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980										
AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	83	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
AVERAGE	74	447	522	197	133	375	62	327	534	2,672
1982										
January	58	513	425	179	106	346	62	334	452	2,474
February	67	537	476	221	120	181	38	362	508	2,510
March	43	437	503	189	118	294	62	307	480	2,433
April	82	360	476	184	166	247	36	266	690	2,507
May	77	419	766	152	95	516	47	302	607	2,981
June	32	481	797	148	129	557	58	322	708	3,231
July	64	536	783	158	118	433	38	376	698	3,204
August	80	443	853	145	106	520	24	317	650	3,137
September	92	493	897	195	89	631	51	278	746	3,472
October	45	459	682	148	109	666	52	262	801	3,222
November	51	553	860	212	90	623	81	334	706	3,508
December	88	561	689	174	102	438	48	336	480	2,916
AVERAGE	65	482	685	175	112	456	50	316	627	2,968
1983										
January	68	536	849	218	73	315	40	299	588	2,988
February	92	592	722	179	81	193	50	192	554	2,655
March	86	488	760	187	78	240	43	162	563	2,606
April	167	452	981	216	85	421	20	183	781	3,306
May	135	501	944	153	108	483	42	235	651	3,252
June	137	576	831	181	120	424	48	252	712	3,281
July	69	633	849	191	103	369	37	364	836	3,450
AVERAGE	107	539	849	189	93	351	40	242	670	3,081

¹ Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² U.S. Possessions.

Totals may not equal sum of components due to independent rounding.

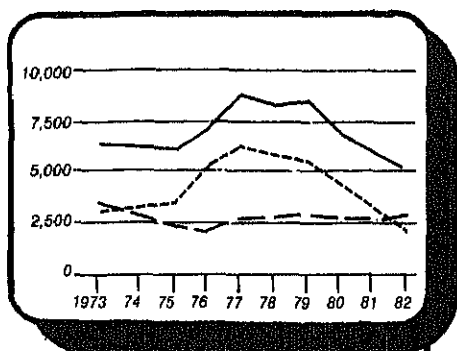
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

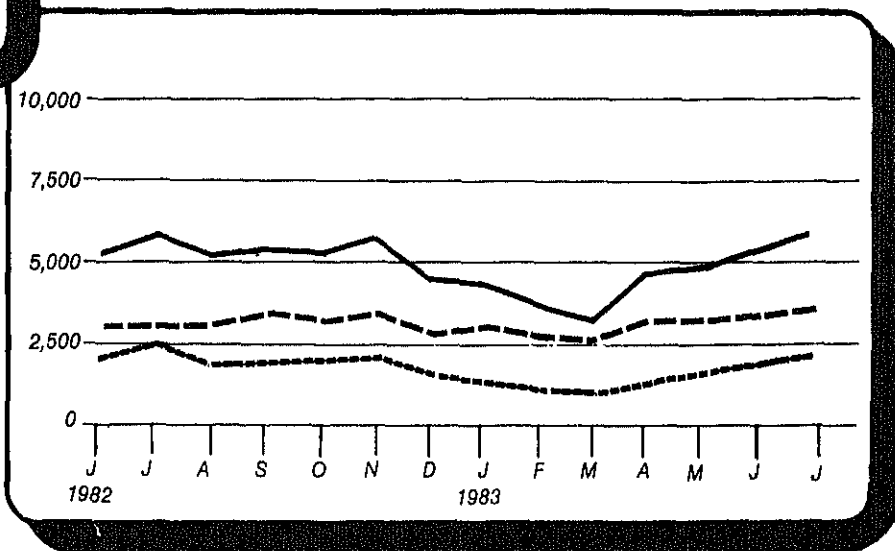
Crude Oil (Including SPR) and Petroleum Products Imports

(Thousand Barrels Per Day)

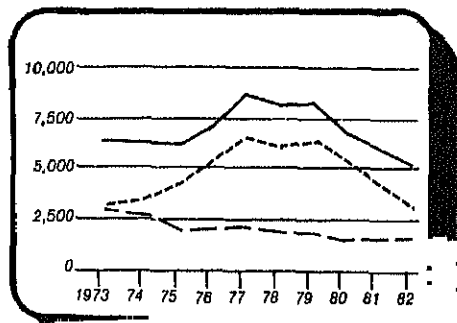


Annual

Legend
 — Total
 - - - OPEC
 - . - Non-OPEC

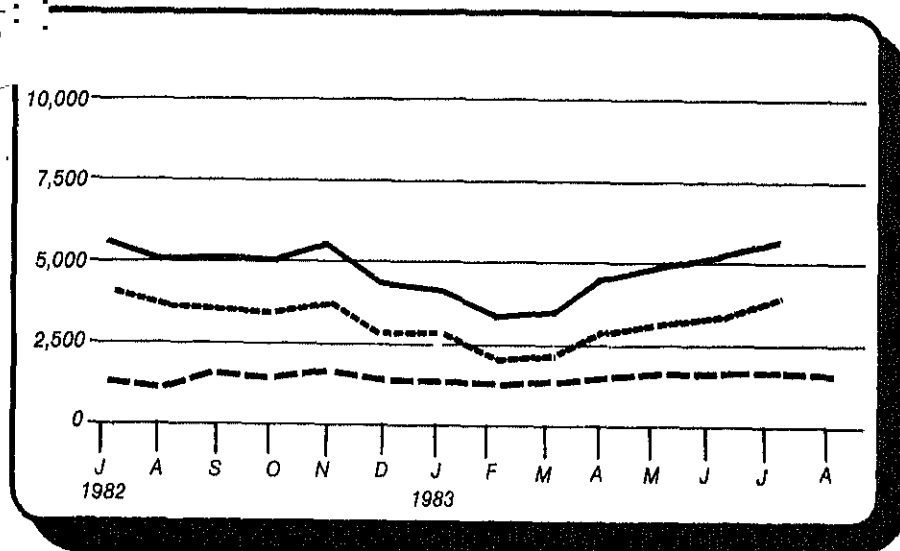


Monthly



Annual

Legend
 — Total
 - - - Crude Oil
 - . - Petroleum Products



Sources

1. 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, *Petroleum Statement, Annual and PAD Districts Supply/Demand, Annual*, Mineral Industry Surveys.
2. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Monthly Petroleum Statistics Report*, (unleaded gasoline category).
3. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Petroleum Statement, Annual and PAD Districts Supply/Demand, Annual*, Energy Data Reports.
4. January 1981 through December 1982: Energy Information Administration, U.S. Department of Energy, *Petroleum Supply Annual*.
5. January 1983 through July 1983: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6).
6. August 1983: Estimates* based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).
7. January 1983 through August 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies the U.S. Geological Survey. (See Explanatory Note 3).

Detailed Statistics

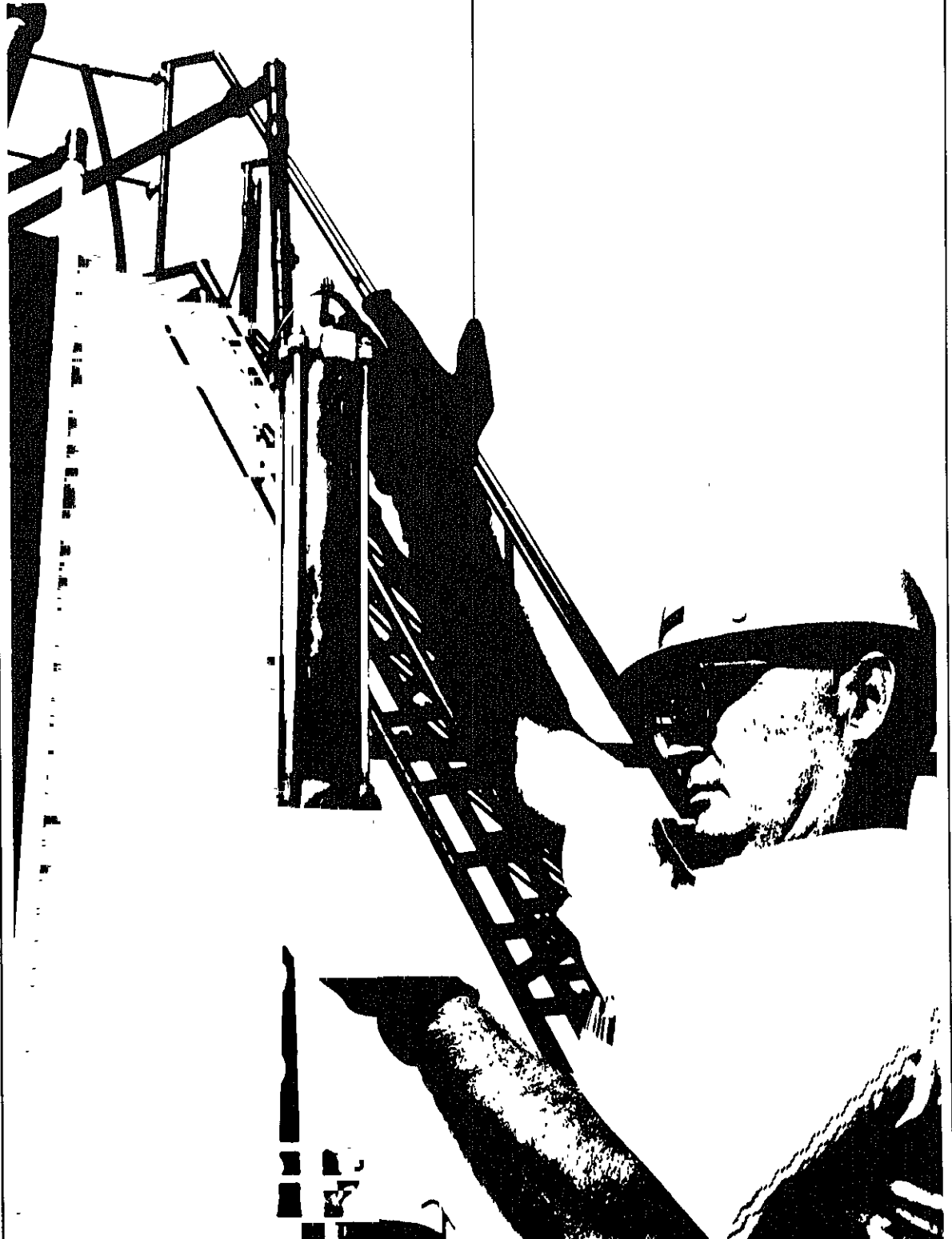


Table 1. U.S. Petroleum Balance, July 1983

	Current Month		Year-to-date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 52,849	1,705	E 362,934	1,712
(2) Lower 48 States ..	E 215,199	6,942	E 1,474,279	6,954
(3) Total U.S.	E 268,048	8,647	E 1,837,213	8,666
Net Imports				
(4) Imports (Gross Excluding SPR)	111,422	3,594	595,800	2,810
(5) SPR Imports	8,490	274	47,804	225
(6) Exports ...	4,494	145	36,460	172
(7) Imports (Net Including SPR)	115,419	3,723	607,144	2,864
Other Sources				
(8) SPR Withdrawal (+) or Addition (-) ..	-8,188	-264	-46,845	-221
(9) Other Stock Withdrawal (+) or Addition (-) ..	11,855	382	8,050	38
(10) Product Supplied and Losses	-2,086	-67	-14,044	-66
(11) Unaccounted for 1	-2,282	-74	45,805	216
(12) Total Other Sources	-701	-23	-7,034	-33
(13) Crude Input to Refineries ..	382,766	12,347	2,437,323	11,497
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	47,628	1,536	328,033	1,547
(15) Imports 2	826	27	2,537	12
(16) Stock Withdrawal (+) or Addition (-) 2 ..	-563	-18	-3,754	-18
(17) Total NGPL Supply	47,891	1,545	326,816	1,542
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-) ..	2,033	66	-909	-4
(19) Imports ..	8,347	269	51,841	245
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,665	54	11,397	54
(21) Refinery Processing Gain 1	13,570	438	99,541	470
(22) Crude Oil Product Supplied ..	2,015	65	13,686	65
(23) Total Other Liquids	27,630	891	175,556	828
(23) = (18) through (22)				
(24) Total Production of Products 3	458,287	14,783	2,939,695	13,866
(24) = (13) + (17) + (23)				
Net Imports of Refined Products 3				
(25) Imports (Gross) ...	47,313	1,526	280,469	1,323
(26) Exports ...	13,217	426	134,269	633
(27) Imports (Net)	34,096	1,100	146,200	690
(28) Total New Supply of Products ...	492,383	15,883	3,085,895	14,556
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) 3	-30,079	-970	71,275	336
(30) Total Petroleum Products Supplied for Domestic Use ..	462,304	14,913	3,157,170	14,892
(30) = (28) + (29)				
(31) Finished Motor Gasoline	209,966	6,773	1,384,164	6,529
(32) Distillate Fuel Oil ...	69,693	2,248	554,187	2,614
(33) Residual Fuel Oil	40,478	1,308	302,880	1,429
(34) Liquefied Petroleum Gases	39,618	1,284	297,105	1,401
(35) Other 4	100,334	3,237	605,149	2,854
(36) Crude Oil	2,015	65	13,086	65
(37) Total Product Supplied	462,304	14,913	3,157,171	14,892
(37) = (31) through (36)				
Ending Stocks, All Oils				
(38) Crude Oil and Lease Condensate (Excluding SPR) ..	341,994	--	341,994	--
(39) Strategic Petroleum Reserve (SPR)	340,672	--	340,672	--
(40) Unfinished Oils	107,102	--	107,102	--
(41) Gasoline Blending Components	41,629	--	41,629	--
(42) Natural Gasoline and Unfractionated Stream 2	15,222	--	15,222	--
(43) Finished Refined Products 3	587,581	--	587,581	--
(44) Total Stocks	1,434,200	--	1,434,200	--

1 A balancing item.

2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.

3 For products included see Explanatory Note 9.7.

4 Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

E = Estimated.

-- Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, July 1983
(Thousand Barrels)

Commodity	Supply				Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 268,048	0	119,913	3,667	-2,282	71	382,766	4,494	2,015	682,666
Natural Gas Liquids and LRGs	47,285	11,074	6,761	-6,943	0	0	13,668	1,691	42,818	127,721
Natural Gasoline and Isopentane	8,435	0	702	-44	0	0	6,096	0	2,997	6,856
Unfractionated Stream	472	0	0	-472	0	0	0	0	7,879	7,879
Plant Condensate	759	0	124	-47	0	0	834	0	2	487
Liquefied Petroleum Gases	37,619	11,074	5,935	-6,380	0	0	6,738	1,691	39,818	112,499
Ethane	7,599	566	2,670	602	0	0	88	29	11,320	5,330
Propane	13,130	8,479	696	-4,927	0	0	102	750	16,527	59,108
Butane	6,144	1,808	1,145	-2,245	0	0	3,650	912	2,290	22,735
Butane-Propane Mixtures	150	132	294	-132	0	0	275	0	169	1,388
Ethane-Propane Mixtures	7,765	0	1,129	601	0	0	0	0	9,495	12,934
Isobutane	2,831	89	0	-279	0	0	2,623	0	18	11,004
Other Liquids	1,665	0	8,347	2,033	0	0	16,534	0	-4,489	148,731
Other Hydrocarbons and Alcohol	1,665	0	0	-36	0	0	1,629	0	0	296
Unfinished Oils	0	0	7,438	3,016	0	0	12,977	0	-2,523	107,102
Motor Gasoline Blending Components	0	0	909	-903	0	0	1,984	0	-1,978	40,822
Aviation Gasoline Blending Components	0	0	0	-44	0	0	-56	0	12	511
Finished Petroleum Products	343	415,464	41,378	-23,699	0	0	0	11,526	421,961	475,082
Finished Motor Gasoline	53	207,775	9,203	-6,496	0	0	0	568	209,966	189,813
Finished Leaded Motor Gasoline	34	92,540	4,180	-2,517	0	0	0	568	93,669	97,919
Finished Unleaded Motor Gasoline	19	115,235	5,023	-3,979	0	0	0	0	116,298	91,894
Finished Aviation Gasoline	104	835	1	50	0	0	0	0	990	2,428
Naphtha-Type Jet Fuel	0	6,631	0	-927	0	0	0	(s)	5,704	7,833
Kerosene-Type Jet Fuel	0	25,256	668	516	0	0	0	37	26,402	33,858
Kerosene	2	2,495	539	-476	0	0	0	2	2,558	8,524
Distillate Fuel Oil	1	80,603	8,016	-17,232	0	0	0	1,695	69,693	131,037
Residual Fuel Oil	0	23,902	21,154	-1,783	0	0	0	2,795	40,478	51,868
Naphtha < 400 Deg. for Petro. Feed. Use	0	4,579	403	-357	0	0	0	146	4,479	2,226
Other Oils > 400 Deg. for Petro. Feed. Use	0	8,291	(s)	-135	0	0	0	357	7,800	2,232
Special Naphthas	126	1,871	445	-207	0	0	0	39	2,195	3,454
Lubricants	0	4,571	251	112	0	0	0	577	4,358	11,622
Waxes	0	532	6	-72	0	0	0	27	440	887
Petroleum Coke	0	13,246	0	1,332	0	0	0	5,253	9,325	4,817
Asphalt and Road Oil	0	15,111	397	2,158	0	0	0	5	17,661	22,913
Still Gas	0	18,017	0	0	0	0	0	0	18,017	0
Miscellaneous Products	57	1,749	295	-182	0	0	0	24	1,894	1,570
Total	317,341	426,538	176,399	-24,942	-2,282	71	412,968	17,711	462,304	1,434,200

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - July 1983
(Thousand Barrels)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 1,837,213	0	643,604	-38,795	45,805	358	2,437,323	36,460	13,686	682,666
Natural Gas Liquids and LRGs	325,534	66,775	43,625	-13,535	0	0	91,936	19,270	311,194	127,721
Natural Gasoline and Isopentane	51,825	0	938	-869	0	0	37,819	0	14,075	6,856
Unfractionated Stream	4,009	0	0	-3,840	0	0	169	0	0	7,879
Plant Condensate	3,942	0	1,599	955	0	0	6,482	0	14	487
Liquefied Petroleum Gases	265,758	66,775	41,089	-9,781	0	0	47,466	19,270	297,105	112,499
Ethane	53,261	3,118	10,326	641	0	0	563	30	66,753	5,330
Propane	93,704	56,722	9,691	-871	0	0	854	11,872	146,520	59,108
Butane	43,111	6,096	9,188	-6,053	0	0	27,757	7,368	17,218	22,735
Butane-Propane Mixtures	1,196	655	3,934	737	0	0	1,536	0	4,986	1,388
Ethane-Propane Mixtures	54,670	0	7,950	-1,652	0	0	0	0	60,968	12,934
Isobutane	19,816	184	0	-2,583	0	0	16,756	0	661	11,004
Other Liquids	11,397	0	51,842	-909	0	0	94,246	0	-31,916	148,731
Other Hydrocarbons and Alcohol	11,397	0	0	15	0	0	11,412	0	0	296
Unfinished Oils	0	0	45,337	-1,825	0	0	58,602	0	-15,090	107,102
Motor Gasoline Blending Components	0	0	6,504	920	0	0	23,702	0	-16,278	40,822
Aviation Gasoline Blending Components	0	0	1	-19	0	0	530	0	-548	511
Finished Petroleum Products	2,500	2,656,271	239,380	81,056	0	0	0	114,999	2,864,207	475,082
Finished Motor Gasoline	521	1,323,874	49,088	12,724	0	0	0	2,043	1,384,164	189,813
Finished Leaded Motor Gasoline	356	601,601	27,405	4,236	0	0	0	2,043	631,555	97,919
Finished Unleaded Motor Gasoline	165	722,273	21,684	8,488	0	0	0	0	752,610	91,894
Finished Aviation Gasoline	486	4,577	210	-114	0	0	0	0	5,159	2,428
Naphtha-Type Jet Fuel	0	45,112	0	-644	0	0	0	201	44,267	7,833
Kerosene-Type Jet Fuel	1	170,311	5,111	-1,857	0	0	0	637	172,929	33,858
Kerosene	22	21,828	1,397	2,268	0	0	0	66	25,449	8,524
Distillate Fuel Oil	10	491,072	24,552	54,542	0	0	0	15,990	554,187	131,037
Residual Fuel Oil	0	184,720	146,057	16,361	0	0	0	44,258	302,880	51,868
Naphtha < 400 Deg. for Petro. Feed. Use	0	28,285	2,610	-259	0	0	0	843	30,794	2,226
Other Oils > 400 Deg. for Petro. Feed. Use	0	56,278	179	-52	0	0	0	3,003	53,402	2,232
Special Naphthas	665	11,489	3,840	20	0	0	0	470	15,543	3,454
Lubricants	0	29,595	1,587	1,559	0	0	0	3,384	29,357	11,622
Waxes	0	3,204	155	-101	0	0	0	141	3,117	887
Petroleum Coke	0	86,364	0	1,904	0	0	0	43,545	44,723	4,817
Asphalt and Road Oil	0	73,625	1,317	-5,644	0	0	0	225	69,073	22,913
Still Gas	0	113,331	0	0	0	0	0	0	113,331	0
Miscellaneous Products	795	11,606	3,276	349	0	0	0	194	15,831	1,570
Total	2,176,644	2,723,046	978,451	27,817	45,805	358	2,623,505	170,729	3,157,171	1,434,200

1 Unaccounted for crude oil is a balancing item.

(S) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, July 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,647	0	3,868	118	-74	2	12,347	145	65
Natural Gas Liquids and LRGs	1,525	357	218	-224	0	0	441	55	1,381
Natural Gasoline and Isopentane	272	0	23	-1	0	0	197	0	97
Unfractionated Stream	15	0	0	-15	0	0	0	0	0
Plant Condensate	24	0	4	-2	0	0	27	0	(s)
Liquefied Petroleum Gases	1,214	357	191	-206	0	0	217	55	1,284
Ethane	245	18	86	19	0	0	3	1	365
Propane	424	274	22	-159	0	0	3	24	533
Butane	198	58	37	-72	0	0	118	29	74
Butane-Propane Mixtures	5	4	9	-4	0	0	9	0	5
Ethane-Propane Mixtures	250	0	36	19	0	0	0	0	306
Isobutane	91	3	0	-9	0	0	85	0	1
Other Liquids	54	0	269	66	0	0	533	0	-145
Other Hydrocarbons and Alcohol	54	0	0	-1	0	0	53	0	0
Unfinished Oils	0	0	240	97	0	0	419	0	-81
Motor Gasoline Blending Components	0	0	29	-29	0	0	64	0	-64
Aviation Gasoline Blending Components	0	0	0	-1	0	0	-2	0	(s)
Finished Petroleum Products	11	13,402	1,335	-764	0	0	0	372	13,612
Finished Motor Gasoline	2	6,702	297	-210	0	0	0	18	6,773
Finished Leaded Motor Gasoline	1	2,985	135	-81	0	0	0	18	3,022
Finished Unleaded Motor Gasoline	1	3,717	162	-128	0	0	0	0	3,752
Finished Aviation Gasoline	3	27	(s)	2	0	0	0	0	32
Naphtha-Type Jet Fuel	0	214	0	-30	0	0	0	(s)	184
Kerosene-Type Jet Fuel	0	815	22	17	0	0	0	1	852
Kerosene	(s)	80	17	-15	0	0	0	(s)	83
Distillate Fuel Oil	(s)	2,600	259	-556	0	0	0	55	2,248
Residual Fuel Oil	0	771	682	-58	0	0	0	90	1,306
Naphtha < 400 Deg. for Petro. Feed. Use	0	148	13	-12	0	0	0	5	144
Other Oils > 400 Deg. for Petro. Feed. Use	0	267	(s)	-4	0	0	0	12	252
Special Naphthas	4	60	14	-7	0	0	0	1	71
Lubricants	0	147	8	4	0	0	0	19	141
Waxes	0	17	(s)	-2	0	0	0	1	14
Petroleum Coke	0	427	0	43	0	0	0	169	301
Asphalt and Road Oil	0	487	13	70	0	0	0	(s)	570
Still Gas	0	581	0	0	0	0	0	0	581
Miscellaneous Products	2	56	10	-6	0	0	0	1	61
Total	10,237	13,759	5,690	-805	-74	2	13,322	571	14,913

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - July 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,666	0	3,036	-183	216	2	11,497	172	65
Natural Gas Liquids and LRGs	1,536	315	206	-64	0	0	434	91	1,468
Natural Gasoline and Isopentane	244	0	4	-4	0	0	178	0	66
Unfractionated Stream	19	0	0	-18	0	0	1	0	0
Plant Condensate	19	0	8	5	0	0	31	0	(s)
Liquefied Petroleum Gases	1,254	315	194	-46	0	0	224	91	1,401
Ethane	251	15	49	3	0	0	3	315	691
Propane	442	268	46	-4	0	0	4	56	81
Butane	203	29	43	-29	0	0	131	35	24
Butane-Propane Mixtures	6	3	19	3	0	0	7	0	288
Ethane-Propane Mixtures	258	0	37	-8	0	0	0	0	3
Isobutane	93	1	0	-12	0	0	79	0	-151
Other Liquids	54	0	245	-4	0	0	445	0	0
Other Hydrocarbons and Alcohol	54	0	0	(s)	0	0	54	0	-71
Unfinished Oils	0	0	214	-9	0	0	276	0	-77
Motor Gasoline Blending Components	0	0	31	4	0	0	112	0	-3
Aviation Gasoline Blending Components	0	0	(s)	(s)	0	0	3	0	13,510
Finished Petroleum Products	12	12,530	1,129	382	0	0	0	542	6,529
Finished Motor Gasoline	2	6,245	232	60	0	0	0	10	2,979
Finished Leaded Motor Gasoline	2	2,838	129	20	0	0	0	10	3,550
Finished Unleaded Motor Gasoline	1	3,407	102	40	0	0	0	0	24
Finished Aviation Gasoline	2	22	1	-1	0	0	0	0	209
Naphtha-Type Jet Fuel	0	213	0	-3	0	0	0	0	816
Kerosene-Type Jet Fuel	(s)	803	24	-9	0	0	0	3	120
Kerosene	(s)	103	7	11	0	0	0	(s)	2,614
Distillate Fuel Oil	(s)	2,316	116	257	0	0	0	75	1,429
Residual Fuel Oil	0	871	689	77	0	0	0	209	145
Naphtha < 400 Deg. for Petro Feed Use	0	138	12	-1	0	0	0	4	252
Other Oils > 400 Deg. for Petro Feed Use	0	265	1	(s)	0	0	0	14	73
Special Naphthas	3	54	18	(s)	0	0	0	2	138
Lubricants	0	140	7	7	0	0	0	16	15
Waxes	0	15	1	(s)	0	0	0	1	205
Petroleum Coke	0	407	0	9	0	0	0	211	326
Asphalt and Road Oil	0	347	6	-27	0	0	0	1	535
Still Gas	0	535	0	0	0	0	0	0	75
Miscellaneous Products	4	55	15	2	0	0	0	1	14,892
Total	10,267	12,845	4,615	131	216	2	12,375	805	

¹ Unaccounted for crude oil is a balancing item

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, July 1983
(Thousand Barrels)

Commodity	Supply				Disposition						Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 2,545	0	27,580	-169	-115	4,906	1	34,746	0	0	16,253
Natural Gas Liquids and LRGs	836	1,107	568	-366	0	1,660	0	63	32	3,709	5,285
Liquefied Petroleum Gases	706	1,107	227	-329	0	1,660	0	35	32	3,303	5,199
Other Products ²	130	0	341	-37	0	0	0	28	0	406	86
Other Liquids	116	0	2,853	607	0	9	0	3,732	0	-147	17,264
Other Hydrocarbons and Alcohol	116	0	0	-59	0	0	0	57	0	0	95
Unfinished Oils	0	0	2,572	864	0	9	0	3,365	0	80	12,456
Motor Gasoline Blending Components	0	0	281	-198	0	0	0	310	0	-227	4,713
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	44	38,990	34,546	-15,335	0	73,297	0	0	512	131,031	160,253
Finished Motor Gasoline	44	18,153	7,749	-2,878	0	47,287	0	0	3	70,352	59,643
Finished Leaded Motor Gasoline	25	6,930	3,317	-1,373	0	17,944	0	0	3	26,840	31,355
Finished Unleaded Motor Gasoline	19	11,223	4,432	-1,505	0	29,343	0	0	0	43,512	28,288
Finished Aviation Gasoline	0	9	1	98	0	194	0	0	0	302	506
Naphtha-Type Jet Fuel	0	745	0	-241	0	569	0	0	0	1,073	677
Kerosene-Type Jet Fuel	0	1,113	407	-929	0	8,716	0	0	0	9,307	9,236
Kerosene	0	-138	299	-115	0	194	0	0	1	239	3,676
Distillate Fuel Oil	0	8,931	7,018	-9,774	0	12,654	0	0	79	18,750	50,905
Residual Fuel Oil	0	2,782	18,193	-1,345	0	2,106	0	0	(s)	21,736	25,313
Naphtha and Other Oils for Petrochem											
Feedstock	0	373	14	-15	0	12	0	0	34	350	48
Special Naphthas	0	41	87	-101	0	241	0	0	3	265	844
Lubricants	0	633	128	-70	0	650	0	0	153	1,189	3,179
Waxes	0	91	2	6	0	7	0	0	4	102	156
Petroleum Coke	0	1,215	0	84	0	0	0	0	221	1,078	683
Asphalt and Road Oil	0	3,171	385	-3	0	444	0	0	1	3,996	5,043
Still Gas	0	1,738	0	0	0	0	0	0	0	1,738	0
Miscellaneous Products	0	133	263	-52	0	223	0	0	12	555	344
Total	3,541	40,097	65,547	-15,263	-115	79,872	1	38,541	544	134,593	199,055

1 Unaccounted for crude oil is a balancing item

2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels

E = Estimated

Note. Total may not equal sum of components due to independent rounding.

Sources and estimation procedures See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II, Supply and Disposition of Crude Oil and Petroleum Products, July 1983
(Thousand Barrels)

Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock With-drawal (+) or Addition (-)	Unac-counted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	E 32,159	0	16,409	396	37,830	1,931	12	88,366	346	0	78,034
Natural Gas Liquids and LRGs	8,911	2,306	4,753	-1,545	0	2,995	0	4,068	742	12,511	41,219
Liquefied Petroleum Gases	8,068	2,306	4,753	-1,685	0	1,631	0	2,403	742	11,919	37,439
Other Products ²	843	0	0	50	0	1,364	0	1,665	0	592	3,780
Other Liquids	376	0	802	1,445	0	1,230	0	2,810	0	1,043	25,177
Other Hydrocarbons and Alcohol	376	0	0	23	0	0	0	399	0	0	94
Unfinished Oils	0	0	677	677	0	-9	0	619	0	726	17,351
Motor Gasoline Blending Components	0	0	125	736	0	1,239	0	1,783	0	317	7,523
Aviation Gasoline Blending Components	0	0	0	9	0	0	0	9	0	0	209
Finished Petroleum Products	6	96,623	1,259	-4,105	0	21,573	0	0	280	115,076	121,893
Finished Motor Gasoline	0	56,739	195	-1,602	0	12,995	0	0	107	68,220	57,042
Finished Leaded Motor Gasoline	0	27,832	194	-1,385	0	7,251	0	0	107	33,785	30,804
Finished Unleaded Motor Gasoline	0	28,907	1	-217	0	5,744	0	0	0	34,435	26,238
Finished Aviation Gasoline	0	132	0	-145	0	230	0	0	0	217	720
Naphtha-Type Jet Fuel	0	1,257	0	-683	0	221	0	0	0	795	2,322
Kerosene-Type Jet Fuel	0	3,480	0	557	0	1,293	0	0	0	5,330	7,891
Kerosene	0	181	0	47	0	38	0	0	0	266	1,745
Distillate Fuel Oil	0	18,906	395	-4,076	0	6,260	0	0	0	21,485	33,639
Residual Fuel Oil	0	1,952	545	-3	0	-312	0	0	0	2,182	3,744
Naphtha and Other Oils for Petrochem.	0	972	37	3	0	25	0	0	64	973	252
Feedstock	0	461	64	117	0	130	0	0	1	772	611
Special Naphthas	0	744	8	-191	0	373	0	0	15	919	2,246
Lubricants	0	45	2	-3	0	0	0	0	0	43	95
Waxes	0	3,202	0	386	0	0	0	0	91	3,497	1,212
Petroleum Coke	0	4,439	5	1,508	0	471	0	0	2	6,421	10,199
Asphalt and Road Oil	0	3,938	0	0	0	0	0	0	0	3,938	0
Still Gas	0	175	7	-20	0	-151	0	0	0	17	175
Miscellaneous Products	6	0	0	0	0	0	0	0	(s)	0	0
Total	41,452	98,929	23,223	-3,909	37,830	27,729	12	95,244	1,368	128,629	266,323

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 8. PAD District III, Supply and Disposition of Crude Oil and Petroleum Products, July 1983
(Thousand Barrels)

Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	E 128,371	0	64,658	-5,404	-28,482	15,347	9	174,459	0	22	494,210
Natural Gas Liquids and LRGs	34,252	5,907	294	-4,567	0	-3,447	0	8,398	792	23,249	77,569
Liquefied Petroleum Gases	27,469	5,907	294	-4,004	0	-3,095	0	3,550	792	22,229	66,959
Other Products ²	6,783	0	0	-563	0	-352	0	4,848	0	1,020	10,710
Other Liquids	591	0	3,593	-543	0	-1,239	0	9,778	0	-7,466	68,100
Other Hydrocarbons and Alcohol	591	0	0	-1	0	0	0	590	0	0	101
Unfinished Oils	0	0	3,365	1,076	0	0	0	9,178	0	-4,737	49,428
Motor Gasoline Blending Components	0	0	138	-1,561	0	-1,239	0	79	0	-2,741	18,319
Aviation Gasoline Blending Components	0	0	0	-57	0	0	0	-69	0	12	252
Finished Petroleum Products	283	190,989	3,521	-694	0	-98,407	0	0	4,968	90,724	124,636
Finished Motor Gasoline	0	92,350	(^s)	1,125	0	-62,235	0	0	424	30,816	46,770
Finished Leaded Motor Gasoline	0	38,818	(^s)	1,447	0	-26,212	0	0	424	13,629	22,673
Finished Unleaded Motor Gasoline	0	53,532	0	-322	0	-36,023	0	0	0	17,187	24,097
Finished Aviation Gasoline	104	368	0	52	0	-448	0	0	0	76	605
Naphtha-Type Jet Fuel	0	2,847	0	21	0	-985	0	0	(^s)	1,883	2,704
Kerosene-Type Jet Fuel	0	12,236	116	1,349	0	-10,722	0	0	0	2,979	10,375
Kerosene	2	2,278	240	-405	0	-232	0	0	(^s)	1,883	2,704
Distillate Fuel Oil	1	37,448	459	-2,722	0	-19,383	0	0	391	15,412	32,450
Residual Fuel Oil	0	10,061	2,057	-223	0	-1,786	0	0	844	9,265	13,756
Naphtha and Other Oils for Petrochem.	0	10,837	353	-445	0	-37	0	0	397	10,311	3,464
Feedstock	126	1,258	277	-211	0	-371	0	0	35	1,044	1,842
Special Naphthas	0	2,751	(^s)	493	0	-1,214	0	0	369	1,661	4,815
Lubricants	0	328	2	-77	0	-7	0	0	20	226	556
Waxes	0	0	0	119	0	0	0	0	2,477	2,604	678
Petroleum Coke	0	4,962	0	0	0	-915	0	0	(^s)	3,667	3,391
Asphalt and Road Oil	0	4,342	0	240	0	0	0	0	0	7,758	0
Sill Gas	0	7,758	0	0	0	0	0	0	0	1,141	726
Miscellaneous Products	50	1,165	17	-10	0	-72	0	0	9	0	0
Total	163,497	196,896	71,976	-11,208	-28,482	-87,746	9	192,635	5,760	106,529	764,615

1 Unaccounted for crude oil is a balancing item.

2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(^s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV, Supply and Disposition of Crude Oil and Petroleum Products, July 1983
(Thousand Barrels)

Commodity	Supply				Net Receipts	Disposition				Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)		Unaccounted For Crude Oil	Crude Losses	Refinery Inputs	Exports		Products Supplied
Crude Oil (including lease condensate)	E 17,571	0	1,481	1,514	-6,186	0	0	14,375	0	5	13,298
Natural Gas Liquids and LRGs	2,220	144	327	-15	0	-1,208	0	431	0	1,037	1,109
Liquefied Petroleum Gases	766	144	238	-6	0	-196	0	312	0	634	523
Other Products ²	1,454	0	89	-9	0	-1,012	0	119	0	403	586
Other Liquids	0	0	87	416	0	0	0	-366	0	869	4,492
Other Hydrocarbons and Alcohol	0	0	0	0	0	0	0	0	0	0	1
Unfinished Oils	0	0	87	103	0	0	0	-520	0	710	2,757
Motor Gasoline Blending Components	0	0	0	313	0	0	0	154	0	159	1,734
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	10	14,661	145	937	0	-189	0	0	5	15,559	11,598
Finished Motor Gasoline	9	7,382	73	-31	0	-94	0	0	(S)	7,338	4,695
Finished Leaded Motor Gasoline	9	4,611	70	-5	0	-189	0	0	(S)	4,496	2,969
Finished Unleaded Motor Gasoline	0	2,771	3	-26	0	95	0	0	0	2,843	1,726
Finished Aviation Gasoline	0	47	0	-9	0	24	0	0	0	62	63
Naphtha-Type Jet Fuel	0	408	0	-1	0	-71	0	0	0	336	368
Kerosene-Type Jet Fuel	0	696	0	35	0	389	0	0	0	1,120	719
Kerosene	0	40	0	1	0	0	0	0	1	40	26
Distillate Fuel Oil	0	3,921	67	-240	0	-437	0	0	0	3,311	3,041
Residual Fuel Oil	0	359	5	-60	0	0	0	0	0	304	497
Naphtha and Other Oils for Petrochem.											
Feedstock	0	0	0	1	0	0	0	0	(S)	1	2
Special Naphthas	0	5	(S)	-3	0	0	0	0	(S)	2	18
Lubricants	0	26	(S)	7	0	0	0	0	1	32	65
Waxes	0	8	0	3	0	0	0	0	0	11	1
Petroleum Coke	0	323	0	812	0	0	0	0	1	1,134	140
Asphalt and Road Oil	0	842	0	446	0	0	0	0	(S)	1,288	1,938
Still Gas	0	528	0	0	0	0	0	0	0	528	0
Miscellaneous Products	1	76	(S)	-24	0	0	0	0	(S)	53	25
Total	19,801	14,805	2,040	2,852	-6,186	-1,397	0	14,440	5	17,469	30,497

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(S) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V, Supply and Disposition of Crude Oil and Petroleum Products, July 1983
(Thousand Barrels)

Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	87,402	0	9,785	7,330	-5,328	-22,184	49	70,820	4,148	1,988	80,871
Natural Gas Liquids and LRGs	1,066	1,610	820	-350	0	0	0	708	125	2,313	2,439
Liquefied Petroleum Gases	610	1,610	423	-346	0	0	0	438	125	1,734	2,379
Other Products ²	456	0	397	-4	0	0	0	270	0	578	60
Other Liquids	582	0	1,102	108	0	0	0	580	0	1,212	33,698
Other Hydrocarbons and Alcohol	582	0	0	1	0	0	0	583	0	0	5
Unfinished Oils	0	0	738	296	0	0	0	335	0	699	25,110
Motor Gasoline Blending Components	0	0	364	-193	0	0	0	-342	0	513	8,533
Aviation Gasoline Blending Components	0	0	0	4	0	0	0	4	0	0	50
Finished Petroleum Products	0	74,201	1,907	-4,502	0	3,726	0	0	5,761	69,571	56,702
Finished Motor Gasoline	0	33,151	1,186	-3,110	0	2,047	0	0	33	33,240	21,663
Finished Leaded Motor Gasoline	0	14,349	599	-1,201	0	1,206	0	0	33	14,920	10,118
Finished Unleaded Motor Gasoline	0	18,802	587	-1,909	0	841	0	0	0	18,321	11,545
Finished Aviation Gasoline	0	279	0	54	0	0	0	0	0	333	534
Naphtha-Type Jet Fuel	0	1,374	0	-23	0	266	0	0	0	1,617	1,762
Kerosene-Type Jet Fuel	0	7,731	144	-496	0	324	0	0	37	7,666	5,637
Kerosene	0	134	0	-4	0	0	0	0	(S)	130	373
Distillate Fuel Oil	0	11,397	76	-420	0	906	0	0	1,225	10,735	11,002
Residual Fuel Oil	0	8,748	354	-152	0	-8	0	0	1,950	6,992	8,558
Naphtha and Other Oils for Petrochem.	0	0	0	0	0	0	0	0	0	0	0
Feedstock	0	688	0	-36	0	0	0	0	7	645	692
Special Naphthas	0	106	16	-9	0	0	0	0	1	112	339
Lubricants	0	417	115	-127	0	191	0	0	38	558	1,317
Waxes	0	60	1	-1	0	0	0	0	3	57	79
Petroleum Coke	0	3,544	0	-69	0	0	0	0	2,461	1,014	2,104
Asphalt and Road Oil	0	2,317	7	-33	0	0	0	0	2	2,290	2,342
Still Gas	0	4,055	0	0	0	0	0	0	0	4,055	0
Miscellaneous Products	0	200	8	-76	0	0	0	0	4	128	300
Total	89,050	75,811	13,614	2,586	-5,328	-18,458	49	72,108	10,035	75,083	173,710
1 Unaccounted for crude oil is a balancing item.											

¹ Unaccounted for crude oil is a balancing item.² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (Including Lease Condensate) by PAD District and State, for the Most Current Available Month,¹ May 1983 (Thousand Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	1,683	54
New York	E 71	E 2
Pennsylvania	E 364	E 12
Virginia	E 4	E 0
West Virginia	311	10
Adjustment 2	90	3
Total PAD District I	E 2,523	E 81
PAD District II		
Illinois	2,480	80
Indiana	427	14
Kansas	5,948	192
Kentucky	669	22
Michigan	E 2,408	E 78
Missouri	E 17	E 1
Nebraska	547	18
North Dakota	4,244	137
Ohio	E 1,238	E 40
Oklahoma	E 13,747	E 443
South Dakota	101	3
Tennessee	99	3
Adjustment 2	-131	-4
Total PAD District II	E 31,794	E 1,026
PAD District III		
Alabama	1,648	53
Arkansas	E 1,601	E 52
Louisiana	E 37,541	E 1,211
Gulf Coast	2,817	91
Rest of State	E 40,358	E 1,302
Total Louisiana	2,580	83
Mississippi	490	16
New Mexico	5,780	186
Northwestern	6,270	202
Southeastern		
Total New Mexico		
Texas		
TRRC District 01	2,065	67
TRRC District 02	3,404	110
TRRC District 03	E 11,026	E 356
TRRC District 04	2,293	74
TRRC District 05	808	26
TRRC District 06, excluding East Texas	3,545	114
TRRC District 07B	2,885	93
TRRC District 07C	2,830	91
TRRC District 08	19,282	622
TRRC District 08A	19,198	619
TRRC District 09	3,226	104
TRRC District 10	1,815	59
East Texas	4,419	143
Total Texas	E 76,796	E 2,477
Adjustment 2	85	3
Total PAD District III	E 129,339	E 4,172
PAD District IV		
Colorado	2,337	75
Montana	E 2,626	E 85
Utah	E 2,446	E 79
Wyoming	E 9,607	E 310
Adjustment 2	577	19
Total PAD District IV	E 17,593	E 568
PAD District V		
Alaska		
South Alaska	2,130	69
North Slope	49,401	1,594
Adjustment for Alaska ²	1,485	48
Total Alaska	53,016	1,710
Arizona	17	1
California		
Central Coastal	6,480	209
East Central	21,579	696
North	16	1
South	6,661	215
Total California	34,736	1,121
Nevada	50	2
Adjustment for Arizona, California, and Nevada ²	84	3
Total PAD District V	87,903	2,836
United States Total	E 269,151	E 8,682

¹ Includes the following offshore production (thousands of barrels).

Alaska: 1,829;

California: Federal- 2,605, State- 2,703;

Louisiana: Federal- E 24,960, State- 2,157;

Texas: Federal- E 1,784, State- 167;

U.S. Total- E 36,205.

² These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.

Sources: See Explanatory Notes on Data Collection and Estimation

E = Estimated.

- Data not available.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District,¹ July 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.
Natural Gas Liquids	448	388	836	0	1,770	474	6,667	8,911	20,013	3,251	7,147	585	3,256	34,252	2,220	1,066
Natural Gasoline and Isopentane	57	40	97	0	57	80	1,230	1,367	1,945	2,493	1,248	138	339	6,163	345	463
Unfractionated Stream	0	33	33	0	782	96	-1,497	-519	11,003	-13,061	364	-134	1,911	83	982	-7
Plant Condensate	0	0	0	0	21	26	48	95	204	284	26	15	8	537	127	0
Liquefied Petroleum Gases	391	315	706	0	910	272	6,886	8,068	6,861	13,535	5,509	566	998	27,469	766	610
Ethane	145	167	312	0	386	0	1,092	1,478	799	2,961	1,923	31	75	5,789	20	0
Propane	146	100	246	0	360	169	2,665	3,194	2,457	3,998	1,808	157	433	8,853	482	0
Butane	81	33	114	0	73	90	990	1,153	1,194	2,106	628	235	245	4,408	251	355
Butane-Propane Mixtures	0	0	0	0	0	0	8	8	51	46	1	10	0	108	8	218
Ethane-Propane Mixtures	0	0	0	0	43	0	1,743	1,786	2,054	3,184	579	0	162	5,979	0	26
Isobutane	19	15	34	0	48	13	388	449	306	1,240	570	133	83	2,332	5	11
Finished Petroleum Products	44	0	44	0	1	0	5	6	266	9	0	6	2	283	10	0
Finished Motor Gasoline	44	0	44	0	0	0	0	0	0	0	0	0	0	0	9	0
Finished Leaded Motor Gasoline	25	0	25	0	0	0	0	0	0	0	0	0	0	0	9	0
Finished Unleaded Motor Gasoline	19	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	104	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	104	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	0	-1	0	0	1	2	2	0	0
Miscellaneous Products	0	0	0	0	0	0	0	0	126	0	0	0	0	126	0	1
Total Production	492	388	880	0	1,771	474	6,672	8,917	20,279	3,260	7,147	591	3,258	34,535	2,230	1,066

1 Production represents quantity of natural gas processing plant output less input to fractionating facilities
Source See Explanatory Notes on Data Collection

¹ Production represents quantity of natural gas processing plant output less input to fractionating facilities
Source See Explanatory Notes on Data Collection and Estimation

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, July 1983
(Thousand Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Crude Oil (including lease condensate)	32,469	2,277	34,746	1,104	58,308	8,685	20,269	88,366	15,407	92,872	58,301	5,454	2,425	174,459	14,375	70,820	382,766
Natural Gas Liquids																	
Natural Gasoline and Isopentane	28	0	28	0	555	93	905	1,553	1,398	2,294	338	48	86	4,164	81	270	6,096
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	104	0	8	112	0	517	9	158	0	684	38	0	834
Liquefied Petroleum Gases	27	8	35	62	1,483	289	569	2,403	478	1,346	1,563	125	38	3,550	312	438	6,738
Ethane	0	0	0	0	2	0	0	2	0	1	85	0	0	86	0	0	88
Propane	0	0	0	0	35	0	0	35	0	2	45	0	0	47	12	8	102
Butane	0	8	8	22	656	218	209	1,105	102	1,054	947	15	0	2,118	176	243	3,650
Butane-Propane Mixtures	0	0	0	0	2	0	0	2	0	64	102	0	7	173	62	38	275
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	27	0	27	40	788	71	360	1,259	376	225	384	110	31	1,126	62	149	2,623
Other Liquids																	
Other Hydrocarbons and Alcohol	57	0	57	0	399	0	0	399	20	261	304	0	5	590	0	583	1,629
Unfinished Oil (net)	3,395	-30	3,365	-15	-205	34	805	619	227	6,776	1,921	112	142	9,178	-520	335	12,977
Motor Gasoline Blending Components (net)	297	13	310	2	878	-37	940	1,783	-868	76	878	-15	8	79	154	-342	1,984
Aviation Gasoline Blending Components (net)	0	0	0	0	42	0	-33	9	-4	0	-65	0	0	-69	0	4	-56
Total Input to Refineries	36,273	2,268	38,541	1,153	61,564	9,064	23,463	95,244	16,658	104,142	63,249	5,882	2,704	192,635	14,440	72,108	412,968
Crude Oil Distillation																	
Gross Input (daily average)	1,081	73	1,154	38	1,905	291	665	2,899	512	3,104	1,896	185	79	5,777	466	2,301	12,596
Operable Capacity (daily average)	1,473	174	1,647	66	2,351	295	854	3,565	612	4,042	2,877	295	107	7,932	561	3,119	16,824
Operating Ratio (percent) ¹	73.4	42.2	70.1	57.0	81.0	98.6	77.9	81.3	83.7	76.8	65.9	62.8	74.2	72.8	83.1	73.8	74.9
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent)	1.01	34	97	86	93	1.58	.59	.92	.69	.87	.69	1.54	76	.82	.93	99	.89
API Gravity, Weighted Average	31.28	41.63	31.97	34.99	36.12	30.80	37.53	35.91	37.75	35.53	34.07	31.89	39.08	35.17	35.17	26.06	33.35
Operable Capacity (daily average)	1,473	174	1,647	66	2,351	295	854	3,565	612	4,042	2,877	295	107	7,932	561	3,119	16,824
Operating	1,266	110	1,376	66	2,173	295	714	3,249	582	3,404	2,264	233	107	6,590	535	2,837	14,587
Idle	207	64	271	0	177	0	140	317	29	638	613	62	0	1,342	26	281	2,237

¹ Represents gross input divided by operable capacity.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, July 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III			PAD District IV		PAD District V	United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La, Ark	Total			Rocky Mt.	Coast
Liquefied Refinery Gases	1,095	12	1,107	26	1,645	194	441	2,306	192	2,840	2,703	77	105	5,907	144	1,610	11,074
For Petrochemical Feedstock Use	369	0	369	0	277	1	69	347	36	1,375	1,305	9	9	2,725	-4	325	3,762
For Other Uses	726	12	738	26	1,368	193	372	1,959	146	1,465	1,398	68	105	3,182	148	1,285	7,312
Ethane	0	0	0	0	0	0	0	0	0	557	10	0	0	567	0	-1	566
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	305	2	0	0	307	0	0	309
For Other Uses	0	0	0	0	0	0	0	0	0	252	8	0	0	260	0	-1	259
Propane	976	12	988	26	1,571	185	534	2,316	208	2,238	1,450	58	56	4,010	170	995	8,479
For Petrochemical Feedstock Use	284	0	284	0	205	0	69	274	36	1,005	199	0	0	1,240	0	225	2,023
For Other Uses	692	12	704	26	1,366	185	465	2,042	172	1,233	1,251	58	56	2,770	170	770	6,456
Butane	119	0	119	0	10	9	-97	-78	-28	-54	1,237	17	31	1,203	-1	565	1,808
For Petrochemical Feedstock Use	85	0	85	0	0	1	-97	-79	0	-44	1,104	9	0	1,157	0	100	1,343
For Other Uses	34	0	34	0	10	8	0	-4	-28	98	133	8	31	46	-21	465	465
Butane-Propane Mixtures	0	0	0	0	-8	0	4	-4	2	78	6	2	18	106	-1	51	132
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	-4	0	0	0	0	0	0	0	0	0
For Other Uses	0	0	0	0	-8	0	4	-4	2	78	6	2	18	106	-21	51	132
Isobutane for Petro. Feed Use	0	0	0	0	72	0	0	72	0	21	0	0	0	21	-4	0	89
Finished Motor Gasoline	17,385	768	18,153	634	37,148	4,827	14,130	56,739	8,428	48,986	31,963	1,844	1,129	92,350	7,382	33,151	207,775
Finished Leaded Motor Gasoline	6,553	377	6,930	303	16,499	2,568	8,462	27,832	4,090	20,125	13,099	882	622	38,818	4,611	14,349	92,540
Finished Unleaded Motor Gasoline	10,832	391	11,223	331	20,649	2,259	5,668	28,907	4,338	28,861	18,864	962	507	53,532	2,771	18,802	115,235
Finished Aviation Gasoline	9	0	9	0	107	0	25	132	4	222	142	0	0	368	47	279	835
Naphtha-Type Jet Fuel	700	45	745	15	740	104	398	1,257	699	989	489	169	501	2,847	408	1,374	6,631
Kerosene-Type Jet Fuel	1,113	0	1,113	13	2,544	431	492	3,480	726	5,755	5,697	6	52	12,236	696	7,731	25,256
Kerosene	-150	12	-138	14	123	6	38	181	23	1,340	913	1	1	2,278	40	134	2,495
Distillate Fuel Oil	8,304	627	8,931	265	11,153	1,929	5,559	18,906	3,624	20,211	11,260	1,628	725	37,448	3,921	11,397	80,603
Residual Fuel Oil	2,729	53	2,782	62	1,339	216	335	1,952	600	2,006	2,149	261	45	10,061	359	8,748	23,902
Naphtha < 400 Deg For Petro. Feed Use	367	0	367	0	773	0	61	834	563	2,422	222	65	0	3,272	0	106	4,579
Other Oils > 400 Deg. For Petro. Feed Use	6	0	6	0	137	0	1	138	115	4,861	2,589	0	0	7,565	0	582	8,291
Special Naphthas	258	33	291	0	276	0	185	461	16	1,080	24	198	0	1,258	5	106	1,871
Lubricants	375	375	750	0	417	0	327	744	3	1,772	681	295	0	2,751	26	417	4,571
Waxes	20	71	91	0	9	0	36	45	8	162	105	53	0	328	8	60	532
Petroleum Coke	1,199	16	1,215	12	2,233	297	660	3,202	303	2,632	1,922	93	12	4,962	323	3,544	13,246
Marketable	446	0	446	0	1,230	172	449	1,851	64	1,088	1,088	70	0	2,310	153	2,763	7,523
Catalyst	753	16	769	12	1,003	125	211	1,351	239	1,544	834	23	12	2,652	170	781	5,723
Asphalt and Road Oil	3,084	87	3,171	105	2,776	950	608	4,439	622	615	1,969	1,023	113	4,342	842	2,317	15,111
Still Gas	1,653	85	1,738	34	2,664	321	919	3,938	465	4,560	2,476	207	50	7,758	528	4,055	18,017
For Petrochemical Feedstock Use	186	0	186	0	1	0	0	1	5	445	46	0	0	496	26	66	775
For Other Uses	1,467	85	1,552	34	2,663	321	919	3,937	460	4,115	2,430	207	50	7,262	502	3,989	17,242
Miscellaneous Products	90	43	133	2	101	26	46	175	66	716	338	45	0	1,165	76	200	1,749
Fuel Use	3	24	27	0	1	0	7	8	0	29	291	4	0	320	4	33	392
Non-Fuel Use	87	19	106	2	100	26	39	167	66	687	47	45	0	845	72	167	1,357
Total Production	37,870	2,227	40,097	1,182	64,185	9,301	24,261	98,929	16,447	106,169	65,642	5,905	2,733	196,896	14,805	75,811	426,538
Processing Gain(-) or Loss(+) ¹	-1,597	41	-1,556	-29	-2,621	-237	-798	-3,685	211	-2,027	-2,393	-23	-29	-4,261	-365	-3,703	-13,570

1 Represents the arithmetic difference between input and output.

Note: See Explanatory Note on negative production

Source: See Explanatory Notes on Data Collection and Estimation

Table 15. Percent Refinery Yield of Petroleum Products by PAD District, 1 July 1983

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark.	New Mexico		Total	Rocky Mt.	West Coast
Finished Motor Gasoline ²	47.3	33.2	46.5	52.3	58.1	51.4	55.6	56.7	47.3	44.6	47.9	27.5	38.6	45.4	49.1	45.3	48.1
Finished Aviation Gasoline ³	0	0	0	0	0	0	0	1	1	2	3	0	0	2	3	4	2
Liquefied Refinery Gases	3.1	5	2.9	2.4	2.8	2.2	2.1	2.6	1.2	2.9	4.5	1.4	4.1	3.2	1.0	2.3	2.8
Naphtha-Type Jet Fuel	2.0	2.0	2.0	1.4	1.3	1.2	1.9	1.4	4.5	1.0	0.8	3.0	19.5	1.6	2.9	1.9	1.7
Kerosene-Type Jet Fuel	3.1	0	2.9	1.2	4.4	4.9	2.3	3.9	4.6	5.8	9.5	1	2.0	6.7	5.0	10.9	6.4
Kerosene	-4	5	-4	1.3	2	1	2	2	1	1.3	1.5	0	0	1.2	3	2	5
Distillate Fuel Oil	23.2	27.9	23.4	24.3	19.2	22.1	26.4	21.2	23.2	20.3	18.7	29.2	28.2	20.4	28.3	16.0	20.4
Residual Fuel Oil	7.6	2.4	7.3	5.7	2.3	2.5	1.6	2.2	3.8	7.0	3.6	4.7	1.8	5.5	2.6	12.3	6.0
Naphtha < 400 Deg. F. Petro Feed Use	1.0	0	1.0	0	1.3	0	0	3	9	2.4	4	1.2	0	1.8	0	1	1.2
Other Oils > 400 Deg F. Petro. Feed Use	0	0	0	0	0	0	0	2	0	4.9	4.3	0	0	4.1	0	8	2.1
Special Naphthas	0	1.5	1	0	0	0	0	9	0	1.1	0	2.5	0	7	0	1	5
Lubricants	7	16.7	17	0	0	0	1.6	0	0	1.8	1.1	5.3	0	15	2	6	12
Waxes	1	3.2	2	0	0	0	0	2	1	0	2	1	0	2	1	1	3
Petroleum Coke	3.3	7	3.2	1.1	3.8	3.4	3.1	3.6	1.9	2.6	3.2	1.7	5	2.7	2.3	5.0	3.3
Asphalt and Road Oil	8.6	3.9	8.3	9.6	4.8	10.9	2.9	5.0	4.0	0.6	3.3	18.4	4.4	2.4	6.1	3.3	3.8
Still Gas	4.6	3.8	4.6	3.1	4.6	3.7	4.4	4.4	3.0	4.6	4.1	3.7	1.9	4.2	3.8	5.7	4.6
Miscellaneous Products	3	1.9	3	2	2	3	2	2	0	7	0.6	8	0	6	5	3	4
Processing Gain(-) or Loss(+) ⁴	-4.5	1.8	-4.1	-2.7	-4.5	-2.7	-3.8	-4.1	1.3	-2.0	-4.0	-4	-1.1	-2.3	-2.6	-5.2	-3.4

¹ Based on crude oil input and net returns of unfinished oils.

² Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol

³ Based on finished aviation gasoline output plus net output of aviation gasoline blending components

⁴ Represents the difference between input and production.

Note: Totals may not equal sum of components due to independent rounding.

Note: See Explanatory Note on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, July 1983
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ^{1 2}	27,580	16,409	64,658	1,481	9,785	119,913
Natural Gas Liquids						
Natural Gasoline and Isopentane	568	4,753	294	327	820	6,761
Plant Condensate	306	0	0	0	397	702
Liquefied Petroleum Gases	35	0	0	89	0	124
Ethane	227	4,753	294	238	423	5,935
Propane	0	2,670	0	0	0	2,670
Butane	120	311	0	120	145	596
Butane-Propane Mixtures	106	643	0	118	279	1,145
Ethane-Propane Mixtures	0	0	294	0	0	294
	0	1,129	0	0	0	1,129
Other Liquids ¹						
Unfinished Oils ¹	2,853	802	3,503	87	1,102	8,347
Motor Gasoline Blending Components	2,572	677	3,365	87	738	7,438
Aviation Gasoline Blending Components	281	125	138	0	364	909
	0	0	0	0	0	0
Finished Petroleum Products						
Finished Motor Gasoline	34,546	1,259	3,521	145	1,907	41,378
Finished Leaded Motor Gasoline	7,749	195	(s)	73	1,186	9,203
Finished Unleaded Motor Gasoline	3,317	194	(s)	70	599	4,180
Finished Aviation Gasoline	4,432	1	0	3	587	5,023
Naphtha-Type Jet Fuel	1	0	0	0	0	1
Kerosene-Type Jet Fuel	0	0	0	0	0	0
Bonded Aircraft Fuel	407	0	116	0	144	668
Other	407	0	116	0	144	668
Kerosene	299	0	240	0	0	539
Distillate Fuel Oil	7,018	395	459	67	76	8,016
Bonded Ships Bunkers	0	0	0	0	0	0
Other	7,018	395	459	67	76	8,016
Residual Fuel Oil	18,193	545	2,057	5	354	21,154
Bonded Ships Bunkers	0	0	0	0	0	0
Other	18,193	545	2,057	5	354	21,154
Naphtha < 400 Deg. for Petro Feed Use	14	37	353	0	0	403
Other Oils > 400 Deg. for Petro Feed Use	(s)	(s)	0	0	0	(s)
Special Naphthas	87	64	277	(s)	16	445
Lubricants	128	8	(s)	(s)	115	251
Waxes	2	2	2	0	1	6
Asphalt and Road Oil	385	5	0	0	7	397
Miscellaneous Products	263	7	17	(s)	8	295
Total Imports	65,547	23,223	71,976	2,040	13,614	176,399

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve (s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, July 1983
(Thousand Barrels)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
All PAD Districts														
Arab OPEC														
Algeria	7,728	0	0	0	0	0	0	652	351	0	0	1,003	8,731	282
Iraq	1,910	0	0	0	0	0	0	0	0	0	0	0	1,910	62
Kuwait	0	0	0	0	0	0	0	0	498	0	0	498	498	16
Saudi Arabia	5,364	0	270	0	0	0	0	0	0	0	(s)	0	5,634	182
United Arab Emirates	1,234	0	0	(s)	0	0	0	0	0	0	566	566	1,800	58
Subtotal Arab OPEC	16,236	0	270	(s)	0	0	0	652	849	0	566	2,337	18,573	599
Other OPEC														
Ecuador	2,223	0	0	0	0	0	0	0	129	0	0	129	2,352	76
Gabon	1,028	0	0	0	0	0	0	0	0	0	0	0	1,028	33
Indonesia	13,092	0	42	0	277	0	0	0	584	0	397	1,299	14,392	464
Iran	3,465	0	0	0	0	0	0	0	0	0	0	0	3,465	112
Nigeria	16,279	0	0	0	0	0	0	0	0	0	2	2	16,280	525
Venezuela	5,141	0	729	0	1,108	0	240	2,424	3,717	0	(s)	8,218	13,359	431
Subtotal Other OPEC	41,229	0	770	0	1,385	0	240	2,424	4,430	0	398	9,648	50,877	1,641
Other														
Angola	3,181	0	0	0	0	0	0	0	305	0	0	305	3,487	112
Bahamas	0	0	795	0	0	0	234	0	883	0	235	2,148	2,148	69
Bolivia	247	0	0	0	0	0	0	0	0	0	0	0	247	8
Brazil	0	0	0	0	1,008	0	0	0	336	0	(s)	1,344	1,344	43
Brunei	199	0	0	0	0	0	0	0	0	0	0	0	199	6
Canada	10,232	5,641	327	125	593	8	11	1,049	1,064	221	337	9,376	19,608	633
Congo	1,672	0	0	0	0	0	0	0	0	0	0	0	1,672	54
Egypt	335	0	0	0	0	0	0	0	0	0	0	0	335	11
France	0	0	0	0	0	0	0	0	0	0	(s)	0	0	(s)
Malaysia	0	0	0	0	84	0	0	0	43	0	0	128	128	4
Mexico	25,096	294	0	282	280	116	(s)	9	215	1	11	1,208	26,305	849
Netherlands	0	(s)	263	22	916	0	0	479	0	46	103	1,829	1,829	59
Netherlands Antilles	0	0	1,572	0	(s)	29	0	471	3,554	0	285	5,912	5,912	191
Norway	3,195	0	0	0	0	0	0	0	0	0	0	0	3,195	103
Oman	1,482	0	0	0	489	0	0	0	0	0	0	0	1,482	48
People's Republic of China	363	0	226	273	0	0	0	0	0	0	0	988	988	32
Peru	0	0	0	0	0	0	0	0	976	0	0	976	1,359	44
Puerto Rico	0	0	239	0	532	0	53	0	0	142	185	1,151	1,151	37
Romania	0	0	0	0	739	0	0	227	0	0	0	966	966	31
Trinidad and Tobago	2,667	0	0	0	0	0	0	0	542	0	0	542	3,208	103
United Kingdom	10,732	0	189	0	208	0	0	0	285	0	15	698	11,430	369
Virgin Islands	0	0	2,215	0	2,325	407	0	2,468	3,863	0	0	11,279	11,279	364
Zaire	1,086	0	0	0	0	0	0	0	0	0	0	0	1,086	35
Other Western Hemisphere														
Hemisphere	140	0	(s)	19	0	0	0	13	1,692	0	4	1,728	1,698	60
Other Eastern Hemisphere	1,800	0	571	188	642	107	0	222	2,117	35	41	3,924	5,724	185
Subtotal Other	62,447	5,935	6,398	909	7,818	668	299	4,940	15,875	445	1,216	44,502	106,949	3,450
Total Imports	119,913	5,935	7,438	909	9,203	668	539	8,016	21,154	445	2,181	56,486	176,399	5,690

See footnotes at end of table

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, July 1983
(Thousand Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District I														
Arab OPEC														
Algeria	1,726	0	0	0	0	0	0	652	351	0	0	1,003	2,729	88
Saudi Arabia	1,593	0	270	0	0	0	0	0	0	0	(s)	270	1,862	60
United Arab Emirates	0	0	0	(s)	0	0	0	0	0	0	566	566	566	18
Subtotal Arab OPEC	3,319	0	270	(s)	0	0	0	652	351	0	566	1,839	5,158	166
Other OPEC														
Ecuador	1	0	0	0	0	0	0	0	129	0	0	129	130	4
Gabon	827	0	0	0	0	0	0	0	0	0	0	0	827	27
Indonesia	2,534	0	0	0	0	0	0	0	0	0	0	0	2,534	82
Iran	533	0	0	0	0	0	0	0	0	0	0	0	533	17
Nigeria	1,405	0	0	0	0	0	0	0	0	0	0	0	1,405	45
Venezuela	3,270	0	0	0	1,108	0	0	1,981	3,266	0	(s)	6,355	9,625	310
Subtotal Other OPEC	8,570	0	0	0	1,108	0	0	1,981	3,395	0	(s)	6,464	15,055	486
Other														
Angola	2,103	0	0	0	0	0	0	0	305	0	0	305	2,408	78
Bahamas	0	0	0	0	0	0	234	0	590	0	1	825	825	27
Brazil	0	0	0	0	1,008	0	0	0	336	0	(s)	1,344	1,344	43
Canada	902	227	0	0	203	0	11	587	514	7	158	1,707	2,609	84
Egypt	335	0	0	0	0	0	0	0	0	0	0	0	335	11
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	3,457	(s)	0	281	280	0	0	0	197	0	0	758	4,216	136
Netherlands	0	0	0	0	916	0	0	479	0	10	0	1,406	1,406	45
Netherlands Antilles	0	0	1,572	0	(s)	0	0	471	3,554	0	285	5,883	5,883	190
Norway	2,181	0	0	0	0	0	0	0	0	0	0	0	2,181	70
Oman	518	0	0	0	0	0	0	0	0	0	0	0	518	17
Puerto Rico	383	0	0	0	532	0	53	0	976	0	0	976	1,359	44
Romania	0	0	239	0	739	0	0	227	0	70	123	1,017	1,017	33
Trinidad and Tobago	446	0	0	0	0	0	0	0	542	0	0	542	966	31
United Kingdom	4,132	0	0	0	208	0	0	0	286	0	0	494	4,826	149
Virgin Islands	0	0	299	0	2,325	407	0	2,468	3,564	0	(s)	9,064	9,064	292
Zaire	734	0	0	0	0	0	0	0	0	0	0	0	734	24
Other Western Hemisphere														
Hemisphere	0	0	0	0	0	0	0	0	1,692	0	0	1,692	1,692	55
Other Eastern Hemisphere	500	0	192	0	430	0	0	153	1,891	(s)	(s)	2,666	3,165	102
Subtotal Other	15,690	227	2,302	281	6,641	407	299	4,386	14,446	87	567	29,644	45,334	1,462
Total Imports	27,580	227	2,572	281	7,749	407	299	7,018	18,193	87	1,133	37,967	65,547	2,114
PAD District II														
Arab OPEC														
Algeria	699	0	0	0	0	0	0	0	0	0	0	0	699	23
Iraq	1,896	0	0	0	0	0	0	0	0	0	0	0	1,896	61
Subtotal Arab OPEC	2,595	0	0	0	0	0	0	0	0	0	0	0	2,595	84

See footnotes at end of table.

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, July 1983
(Thousand Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2'	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District II														
Other OPEC														
Iran	452	0	0	0	0	0	0	0	0	0	0	0	452	15
Nigeria	476	0	0	0	0	0	0	0	0	0	0	0	476	15
Venezuela	252	0	477	0	0	0	0	0	0	0	0	477	729	24
Subtotal Other OPEC	1,180	0	477	0	0	0	0	0	0	0	0	477	1,656	53
Other														
Canada	6,810	4,753	200	125	195	0	0	395	545	64	59	6,338	13,147	424
Congo	860	0	0	0	0	0	0	0	0	0	0	0	860	28
France	0	0	0	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Mexico	2,178	0	0	0	0	0	0	0	0	0	0	0	2,178	70
Netherlands	0	0	0	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Oman	520	0	0	0	0	0	0	0	0	0	0	0	520	17
Trinidad and Tobago	435	0	0	0	0	0	0	0	0	0	0	0	435	14
United Kingdom	792	0	0	0	0	0	0	0	0	0	0	0	792	26
Other Western Hemisphere	140	0	0	0	0	0	0	0	0	0	0	0	140	5
Other Eastern Hemisphere	899	0	0	0	0	0	0	0	0	0	0	0	899	29
Subtotal Other	12,634	4,753	200	125	195	0	0	395	545	64	59	6,338	18,972	612
Total Imports	16,409	4,753	677	125	195	0	0	395	545	64	59	6,814	23,223	749
PAD District III														
Arab OPEC														
Algeria	4,904	0	0	0	0	0	0	0	0	0	0	0	4,904	158
Iraq	14	0	0	0	0	0	0	0	0	0	0	0	14	(s)
Kuwait	0	0	0	0	0	0	0	0	498	0	0	498	498	16
Saudi Arabia	3,771	0	0	0	0	0	0	0	0	0	0	0	3,771	122
United Arab Emirates	1,234	0	0	0	0	0	0	0	0	0	0	0	1,234	40
Subtotal Arab OPEC	9,923	0	0	0	0	0	0	0	498	0	0	498	10,421	336
Other OPEC														
Ecuador	1,861	0	0	0	0	0	0	0	0	0	0	0	1,861	60
Gabon	201	0	0	0	0	0	0	0	0	0	0	0	201	6
Indonesia	2,720	0	0	0	0	0	0	0	505	0	0	505	3,225	104
Iran	2,480	0	0	0	0	0	0	0	0	0	0	0	2,480	80
Nigeria	14,398	0	0	0	0	0	0	0	0	0	2	2	14,399	464
Venezuela	1,279	0	252	0	0	0	240	443	450	0	0	1,386	2,665	86
Subtotal Other OPEC	22,938	0	252	0	0	0	240	443	955	0	2	1,892	24,830	801
Other														
Angola	1,079	0	0	0	0	0	0	0	0	0	0	0	1,079	35
Bahamas	0	0	795	0	0	0	0	0	294	0	234	1,323	1,323	43
Canada	802	0	40	0	0	0	0	0	0	133	0	173	975	31
Congo	812	0	0	0	0	0	0	0	0	0	0	0	812	26
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)

See footnotes at end of table.

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, July 1983
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District III														
Other	19,300	294	0	0	0	116	0	3	13	1	2	429	19,729	636
Mexico	0	0	0	0	0	0	0	0	0	36	103	161	161	5
Netherlands	1,014	0	0	0	0	0	0	0	0	0	0	0	1,014	33
Norway	443	0	0	0	0	0	0	0	0	0	0	0	443	14
Oman	0	0	0	0	0	0	0	0	0	72	0	72	72	2
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	1,785	0	0	0	0	0	0	0	0	0	0	0	1,785	58
United Kingdom	5,809	0	189	0	0	0	0	0	0	0	15	204	6,012	194
Virgin Islands	0	0	1,916	0	0	0	0	0	298	0	0	2,215	2,215	71
Zaire	352	0	0	0	0	0	0	0	0	0	0	0	352	11
Other Western Hemisphere	0	0	0	19	0	0	0	13	0	0	4	36	36	1
Other Eastern Hemisphere	401	0	172	97	0	0	0	0	0	35	11	315	716	23
Subtotal Other	31,797	294	3,112	138	0	116	0	16	605	277	370	4,927	36,724	1,185
Total Imports	64,658	294	3,365	138	0	116	240	459	2,057	277	371	7,317	71,976	2,322
PAD District IV														
Other	1,481	238	87	0	73	0	0	67	5	0	90	558	2,040	66
Canada	1,481	238	87	0	73	0	0	67	5	0	90	558	2,040	66
Subtotal Other	1,481	238	87	0	73	0	0	67	5	0	90	558	2,040	66
Total Imports	1,481	238	87	0	73	0	0	67	5	0	90	558	2,040	66
PAD District V														
Arab OPEC	399	0	0	0	0	0	0	0	0	0	0	0	399	13
Algeria	399	0	0	0	0	0	0	0	0	0	0	0	399	13
Subtotal Arab OPEC	399	0	0	0	0	0	0	0	0	0	0	0	399	13
Other OPEC	362	0	0	0	0	0	0	0	0	0	0	0	362	12
Ecuador	7,839	0	42	0	277	0	0	0	80	0	397	795	8,633	278
Indonesia	340	0	0	0	0	0	0	0	0	0	0	0	340	11
Venezuela	8,541	0	42	0	277	0	0	0	80	0	397	795	9,336	301
Subtotal Other OPEC	362	0	0	0	0	0	0	0	0	0	0	0	362	12
Other	247	0	0	0	0	0	0	0	0	0	0	0	247	8
Bolivia	199	0	0	0	0	0	0	0	0	0	0	0	199	6
Brunei	237	423	0	0	123	8	0	0	0	16	30	600	837	27
Canada	0	0	0	0	84	0	0	0	43	0	0	128	128	4
Malaysia	161	0	0	0	0	0	0	6	6	0	9	21	182	6
Mexico	0	0	263	0	0	0	0	0	0	0	0	263	263	8
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	29	0	0	0	0	0	29	29	1
People's Republic of China	0	0	226	273	489	0	0	0	0	0	0	988	988	32
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	0	0	207	91	213	107	0	70	225	0	62	62	944	30
Subtotal Other	844	423	696	364	909	144	0	76	274	16	131	3,034	3,879	125
Total Imports	9,785	423	738	364	1,186	144	0	76	354	16	527	3,829	13,614	439

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 18. Exports Of Crude Oil And Petroleum Products By PAD District, July 1983
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ¹	0	345	0	0	4,148	4,494
Liquefied Petroleum Gases	32	742	792	0	125	1,691
Ethane	(s)	29	0	0	0	29
Propane	19	281	398	0	51	750
Butane	13	431	393	0	74	912
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	3	107	424	(s)	33	568
Naphtha-Type Jet Fuel	0	0	(s)	0	0	(s)
Kerosene-Type Jet Fuel	0	0	0	0	37	37
Kerosene	1	(s)	(s)	1	(s)	2
Distillate Fuel Oil	79	0	391	0	1,225	1,695
Residual Fuel Oil	(s)	0	844	0	1,950	2,795
Naphtha < 400 Deg. for Petrochem. Feedstock	34	4	101	(s)	6	146
Other Oils > 400 Deg. for Petrochem. Feedstock	0	59	296	0	1	357
Special Naphthas	3	1	35	(s)	1	39
Lubricants	153	15	369	1	38	577
Waxes	4	1	20	0	3	27
Petroleum Coke	221	91	2,477	1	2,461	5,253
Asphalt	1	2	(s)	(s)	2	5
Miscellaneous Products	12	(s)	9	(s)	4	24
Total Product Exports	544	1,022	5,760	5	5,887	13,217
Total Exports	544	1,368	5,760	5	10,035	17,711

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation

Table 19. Exports of Crude Oil and Petroleum Products by Destination, July 1983
(Thousand Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Waxes	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	1	0	0	0	0	0	13	(s)	0	0	162	177	6
Australia	0	1	0	0	0	211	(s)	7	(s)	103	0	(s)	323	10
Bahamas	0	12	1	0	78	0	0	2	0	0	0	(s)	93	3
Bahrain	0	0	0	0	0	0	0	(s)	0	0	0	(s)	3	(s)
Belgium & Luxembourg	0	(s)	0	0	0	0	0	37	(s)	8	0	(s)	46	1
Brazil	0	64	0	0	0	0	8	1	(s)	17	0	2	91	3
Canada	346	751	138	0	1	0	3	53	(s)	238	3	82	1,618	52
Chile	0	(s)	0	0	0	263	(s)	30	(s)	(s)	0	(s)	30	1
China (Taiwan)	0	(s)	0	0	0	0	2	13	(s)	(s)	0	1	278	9
Colombia	0	3	0	0	0	0	0	4	(s)	0	0	2	8	(s)
Costa Rica	0	0	0	0	0	0	0	1	(s)	0	0	0	(s)	(s)
Denmark	0	0	0	0	0	0	0	(s)	0	15	0	(s)	68	2
Dominican Republic	0	51	0	0	0	0	0	1	(s)	0	0	(s)	890	29
Ecuador	0	78	424	0	387	0	0	(s)	0	0	0	1	3	(s)
Egypt	0	0	0	0	0	0	0	2	(s)	0	0	(s)	(s)	(s)
El Salvador	0	0	0	0	0	0	0	(s)	0	482	0	25	488	16
Finland	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
France	0	1	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
French Pacific Isl.	0	0	0	0	0	0	0	2	(s)	0	0	0	77	2
Ghana	0	0	0	0	0	0	0	(s)	0	75	0	(s)	61	2
Greece	0	2	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Guatemala	0	59	0	0	0	0	0	2	1	0	0	0	8	(s)
Guinea	0	0	0	0	0	0	0	(s)	0	0	0	0	2	(s)
Honduras	0	0	0	0	0	0	0	7	(s)	0	0	0	1	(s)
Hong Kong	0	1	0	0	0	0	0	(s)	0	0	0	0	8	(s)
India	0	(s)	0	0	0	0	0	(s)	0	0	0	0	2	(s)
Indonesia	0	0	0	0	(s)	0	0	1	(s)	87	0	1	89	3
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Israel	0	1	0	0	0	0	0	(s)	0	(s)	0	0	1	(s)
Italy	0	1	0	0	0	0	0	1	(s)	435	0	19	456	15
Ivory Coast	0	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)
Jamaica	0	19	0	0	0	212	(s)	(s)	0	(s)	0	0	232	7
Japan	0	1	0	0	546	864	5	21	2	1,144	(s)	5	2,588	83
Jordan	0	0	0	0	0	0	0	1	0	0	0	0	1	(s)
Korea, Republic of	0	1	(s)	0	(s)	0	(s)	2	(s)	175	(s)	1	180	6
Kuwait	0	0	0	0	0	0	0	4	0	(s)	0	0	4	(s)
Lebanon	0	0	0	0	0	0	0	1	0	0	0	0	2	(s)
Liberia	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Malaysia	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Mexico	0	564	2	37	3	0	1	129	16	61	0	7	820	26
Netherlands	0	0	0	0	678	0	5	32	(s)	903	(s)	79	1,698	55
Netherlands Antilles	0	(s)	0	0	0	267	0	1	0	0	0	0	268	9
New Zealand	0	(s)	0	0	0	0	(s)	1	(s)	(s)	0	(s)	1	(s)
Nicaragua	0	(s)	0	0	0	0	7	19	0	0	0	0	26	1
Nigeria	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Norway	0	0	0	0	0	0	0	1	0	24	0	0	26	1
Pacific Trust Terr.	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Panama	0	29	0	0	0	0	3	2	(s)	0	0	1	35	1
Peru	0	(s)	0	0	0	0	0	37	0	0	0	2	40	1
Philippines	0	0	0	0	0	0	0	4	(s)	0	0	1	5	(s)
Puerto Rico	1,578	17	0	0	(s)	0	(s)	11	1	0	0	9	1,614	52
Rep. of South Africa	0	0	0	0	0	(s)	(s)	10	(s)	22	0	4	36	1
Saudi Arabia	0	2	0	0	(s)	0	(s)	5	(s)	1	0	4	12	(s)

See footnotes at end of table.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, July 1983
(Thousand Barrels)

(continued)

Destination	Crude Oil ¹	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Waxes	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Singapore	0	0	0	0	0	0	(s)	2	(s)	(s)	(s)	3	6	(s) 56
Spain	0	(s)	0	0	0	632	0	(s)	0	1,037	(s)	73	1,743	17
Sumnam	0	0	0	0	0	0	0	1	0	16	0	(s)	17	1
Sweden	0	0	0	0	0	0	0	1	(s)	83	0	(s)	84	3
Switzerland	0	(s)	0	0	0	0	(s)	(s)	0	95	0	1	96	3
Thailand	0	0	0	0	0	0	1	17	(s)	0	0	1	18	1
Trinidad and Tobago	0	1	0	0	0	0	0	(s)	(s)	0	(s)	0	1	(s)
Turkey	0	0	0	0	0	0	0	(s)	(s)	0	0	16	16	1
United Arab Emirates	0	(s)	0	0	0	0	0	8	0	56	0	(s)	65	2
United Kingdom	0	3	0	0	1	0	0	22	(s)	0	(s)	1	27	1
U.S.S.R.	0	0	0	0	0	0	0	40	0	0	0	1	40	1
Uruguay	0	0	0	0	0	0	0	1	(s)	0	0	(s)	2	(s)
Venezuela	0	(s)	0	0	0	0	4	(s)	(s)	94	0	1	100	3
Virgin Islands	2,018	22	0	0	0	344	0	0	0	0	0	0	2,384	77
West Germany	0	(s)	0	0	(s)	0	0	6	(s)	75	0	2	84	3
Yugoslavia	0	0	0	0	0	0	0	0	0	25	0	(s)	25	1
Other	554	60	1	0	(s)	0	(s)	19	0	95	(s)	17	748	24
Total	4,494	1,691	568	37	1,695	2,795	39	577	27	5,253	5	530	17,711	571

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with

Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories

(especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical

Tracking Systems count these exchanges and shipments as imports and exports

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, July 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark.	New Mexico	Total	Rocky Mt.	Dist V West Coast	United States
Crude Oil (incl. lease condensate)																	
Refinery	—	—	14,900	—	—	—	—	14,737	—	—	—	—	—	46,877	1,942	24,407	102,863
Tank Farms and Pipelines	—	—	1,297	—	—	—	—	61,701	—	—	—	—	—	89,344	9,984	29,531	191,857
Leases	—	—	56	—	—	—	—	1,596	—	—	—	—	—	17,317	1,372	1,904	22,245
Strategic Petroleum Reserve1	—	—	0	—	—	—	—	0	—	—	—	—	—	340,672	0	0	340,672
Alaskan In-Transit	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	25,029	25,029
Total	—	—	16,253	—	—	—	—	78,034	—	—	—	—	—	494,210	13,298	80,871	582,666
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	37,744	2,719	40,463	1,087	40,218	6,530	14,655	62,490	9,077	82,986	43,464	4,355	1,471	141,353	11,729	65,230	321,265
Bulk Terminal	—	—	114,248	—	—	—	—	90,582	—	—	—	—	—	87,925	2,506	23,214	318,475
Pipeline	—	—	27,877	—	—	—	—	33,837	—	—	—	—	—	36,846	2,726	4,253	105,539
Natural Gas Processing Plant	170	44	214	0	205	54	1,121	1,380	1,871	1,278	777	70	285	4,281	238	142	6,255
Total	—	—	182,802	—	—	—	—	186,289	—	—	—	—	—	270,405	17,199	92,839	751,534
Natural Gasoline and Isopentane																	
Refinery	18	0	18	0	29	10	123	162	71	513	117	1	18	720	5	28	933
Bulk Terminal	—	—	49	—	—	—	—	1,081	—	—	—	—	—	2,387	0	0	3,517
Pipeline	—	—	0	—	—	—	—	572	—	—	—	—	—	831	22	5	1,430
Natural Gas Processing Plant	5	11	16	0	16	14	149	179	308	191	158	22	31	710	47	24	976
Total	—	—	83	—	—	—	—	1,994	—	—	—	—	—	4,648	74	57	6,856
Unfractionated Stream																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	887	—	—	—	—	—	1,974	0	0	2,861
Pipeline	—	—	0	—	—	—	—	192	—	—	—	—	—	2,443	466	0	3,101
Natural Gas Processing Plant	0	3	3	0	97	2	595	694	196	930	99	1	10	1,196	21	3	1,917
Total	—	—	3	—	—	—	—	1,773	—	—	—	—	—	5,613	487	3	7,879
Plant Condensate																	
Refinery	0	0	0	0	4	0	1	5	2	74	0	46	0	122	0	0	127
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	2	0	0	2
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	255	0	0	255
Natural Gas Processing Plant	0	0	0	0	1	3	4	8	33	26	7	4	0	70	25	0	103
Total	—	—	0	—	—	—	—	13	—	—	—	—	—	449	25	0	487
Liquefied Petroleum Gases																	
Refinery	493	9	502	277	1,771	100	615	2,763	157	4,711	2,258	23	19	7,168	278	623	11,334
Bulk Terminal	—	—	1,711	—	—	—	—	28,098	—	—	—	—	—	54,575	75	1,641	86,100
Pipeline	—	—	2,815	—	—	—	—	6,080	—	—	—	—	—	3,089	36	0	12,020
Natural Gas Processing Plant	141	30	171	0	90	35	373	498	1,161	168	513	42	243	2,127	134	115	3,045
Total	—	—	5,199	—	—	—	—	37,439	—	—	—	—	—	66,959	523	2,379	112,499
Ethane																	
Refinery	0	0	0	0	5	0	0	5	0	936	0	0	0	936	0	0	941
Bulk Terminal	—	—	0	—	—	—	—	792	—	—	—	—	—	2,047	0	0	2,839
Pipeline	—	—	0	—	—	—	—	1,228	—	—	—	—	—	292	0	0	1,520

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, July 1983
(Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No La., Ark.	New Mexico	Total	Rocky Mtl		PAD Dist. V
Ethane																	
Natural Gas Processing Plant	0	0	0	0	22	0	0	22	3	1	0	0	3	7	1	0	30
Total	—	—	0	—	—	—	—	2,047	—	—	—	—	—	3,282	1	0	5,330
Propane for Petrochemical Feedstock Use																	
Refinery	35	0	35	0	133	0	1	134	2	7	30	0	0	39	0	0	208
Bulk Terminal	—	—	—	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	35	—	—	—	—	134	—	—	—	—	—	39	0	0	208
Propane For Other Uses																	
Refinery	408	6	414	4	1,163	27	242	1,436	41	1,765	951	4	2	2,763	137	107	4,857
Bulk Terminal	—	—	1,493	—	—	—	—	17,670	—	—	—	—	—	26,117	75	390	45,745
Pipeline	—	—	2,732	—	—	—	—	2,849	—	—	—	—	—	1,172	1	0	6,754
Natural Gas Processing Plant	88	30	118	0	47	23	119	189	496	36	372	18	127	1,049	95	93	1,544
Total	—	—	4,757	—	—	—	—	22,144	—	—	—	—	—	31,101	308	590	58,900
Butane For Petro. Feed Use																	
Refinery	0	0	0	0	0	5	0	5	0	12	0	2	0	14	0	2	21
Bulk Terminal	—	—	—	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	5	—	—	—	—	—	14	0	2	21
Butane For Other Uses																	
Refinery	48	3	51	229	235	46	232	742	25	1,303	686	3	10	2,027	109	300	3,229
Bulk Terminal	—	—	218	—	—	—	—	3,787	—	—	—	—	—	12,683	0	851	17,539
Pipeline	—	—	83	—	—	—	—	819	—	—	—	—	—	328	0	0	1,230
Natural Gas Processing Plant	51	0	51	0	14	10	70	94	287	56	87	17	78	525	32	14	716
Total	—	—	403	—	—	—	—	5,442	—	—	—	—	—	15,563	141	1,165	22,714
Butane-Propane Mixtures For Petro. Feed Use																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Butane-Propane Mixtures For Other Uses																	
Refinery	0	0	0	0	3	0	0	3	1	9	12	1	5	28	5	157	193
Bulk Terminal	—	—	0	—	—	—	—	296	—	—	—	—	—	78	0	153	527
Pipeline	—	—	0	—	—	—	—	20	—	—	—	—	—	624	0	0	644
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	6	6	0	2	0	14	4	6	24
Total	—	—	0	—	—	—	—	319	—	—	—	—	—	744	9	316	1,388

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, July 1983
(Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II						PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. Ark.	New Mexico	Total	Rocky Mt.	Dist. V	West Coast	United States
Ethane-Propane Mixtures																		
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	—	—	—	—	—	3,614	—	—	—	—	—	7,630	0	0	0	11,244
Pipeline	—	—	—	—	—	—	—	630	—	—	—	—	—	528	35	0	0	1,193
Natural Gas Processing Plant	0	0	0	0	0	0	165	165	307	0	0	0	25	332	0	0	0	497
Total	—	—	—	—	—	—	—	4,409	—	—	—	—	—	8,490	35	0	0	12,934
Isobutane																		
Refinery	2	0	2	44	232	22	140	438	88	679	579	13	2	1,361	27	57	0	1,885
Bulk Terminal	—	—	—	—	—	—	—	1,939	—	—	—	—	—	6,020	0	247	0	8,206
Pipeline	—	—	—	—	—	—	—	534	—	—	—	—	—	145	0	0	0	679
Natural Gas Processing Plant	2	0	2	0	7	2	19	28	62	69	54	5	10	200	2	2	0	234
Total	—	—	—	—	—	—	—	2,939	—	—	—	—	—	7,726	29	306	0	11,004
Other Hydrocarbons and Alcohol																		
Refinery	95	0	95	0	94	0	0	94	1	91	9	0	0	101	1	5	0	296
Bulk Terminal	—	—	—	—	—	—	—	0	—	—	—	—	—	0	0	0	0	0
Pipeline	—	—	—	—	—	—	—	0	—	—	—	—	—	0	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	—	0	0	0	0	0	—	0	0	0	0	0
Total	—	—	—	—	—	—	—	94	—	—	—	—	—	101	1	5	0	296
Unfinished Oils																		
Refinery	2,477	155	2,632	43	2,525	126	1,138	3,832	650	7,510	5,225	175	76	13,636	452	5,152	0	25,704
Naphtha and Lighter	1,708	25	1,733	—	3,027	9	485	3,521	415	6,953	1,311	34	30	8,743	808	3,993	0	18,798
Kerosene and Lighter Gas Oils	5,574	246	5,820	134	3,633	253	1,392	5,412	930	10,240	6,813	204	126	18,313	901	10,740	0	41,186
Heavy Gas Oils	1,978	293	2,271	2	3,308	14	1,262	4,586	597	5,833	2,274	32	0	8,736	596	5,225	0	21,414
Residuum	11,737	719	12,456	179	12,493	402	4,277	17,351	2,592	30,536	15,623	445	232	49,428	2,757	25,110	0	107,102
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Motor Gasoline Blending Components																		
Refinery	4,503	126	4,629	33	4,832	697	1,587	7,149	1,390	9,674	6,587	131	121	17,903	1,734	8,431	0	39,846
Bulk Terminal	—	—	—	—	—	—	—	251	—	—	—	—	—	359	0	102	0	796
Pipeline	—	—	—	—	—	—	—	123	—	—	—	—	—	57	0	0	0	180
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	—	—	—	—	—	7,523	—	—	—	—	—	18,319	1,734	8,533	0	40,822
Aviation Gasoline Blending Components																		
Refinery	0	0	0	0	125	0	84	209	63	14	175	0	0	252	0	50	0	511
Bulk Terminal	—	—	—	—	—	—	—	0	—	—	—	—	—	0	0	0	0	0
Pipeline	—	—	—	—	—	—	—	0	—	—	—	—	—	0	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	—	—	—	—	—	209	—	—	—	—	—	252	0	50	0	511
Total Finished Motor Gasoline																		
Refinery	5,037	154	5,191	99	5,789	1,333	2,948	10,169	1,828	9,770	5,025	660	217	17,500	1,863	8,321	0	43,044
Bulk Terminal	—	—	39,653	—	—	—	—	30,467	—	—	—	—	—	12,025	1,394	10,794	0	94,333
Pipeline	—	—	14,775	—	—	—	—	16,406	—	—	—	—	—	17,245	1,428	2,548	0	52,402

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, July 1983
(Thousand Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark	New Mexico	Total	Rocky Mt		Dist V
Total Finished Motor Gasoline																	
Natural Gas Processing Plant	24	0	24	0	0	0	0	0	0	0	0	0	0	0	10	0	34
Total	—	—	59,643	—	—	—	—	57,042	—	—	—	—	—	46,770	4,695	21,663	189,813
Finished Leaded Motor Gasoline																	
Refinery	2,232	78	2,310	64	2,764	874	1,795	5,497	882	4,469	2,209	376	133	8,069	1,169	3,594	20,639
Bulk Terminal	—	—	19,958	—	—	—	—	16,100	—	—	—	—	—	6,489	901	5,284	48,732
Pipeline	—	—	9,073	—	—	—	—	9,207	—	—	—	—	—	8,115	891	1,240	28,526
Natural Gas Processing Plant	14	0	14	0	0	0	0	0	0	0	0	0	0	0	8	0	22
Total	—	—	31,355	—	—	—	—	30,804	—	—	—	—	—	22,673	2,969	10,118	97,919
Finished Unleaded Motor Gasoline																	
Refinery	2,805	76	2,881	35	3,025	459	1,153	4,672	946	5,301	2,816	284	84	9,431	694	4,727	22,405
Bulk Terminal	—	—	19,695	—	—	—	—	14,367	—	—	—	—	—	5,536	493	5,510	45,601
Pipeline	—	—	5,702	—	—	—	—	7,199	—	—	—	—	—	9,130	537	1,308	23,876
Natural Gas Processing Plant	10	0	10	0	0	0	0	0	0	0	0	0	0	0	2	0	12
Total	—	—	28,288	—	—	—	—	26,238	—	—	—	—	—	24,097	1,726	11,545	91,894
Finished Aviation Gasoline																	
Refinery	47	0	47	0	144	0	31	175	25	349	108	0	0	482	43	207	954
Bulk Terminal	—	—	459	—	—	—	—	399	—	—	—	—	—	81	20	327	1,286
Pipeline	—	—	0	—	—	—	—	146	—	—	—	—	—	13	0	0	159
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	29	0	0	0	0	29	0	0	29
Total	—	—	506	—	—	—	—	720	—	—	—	—	—	605	63	534	2,428
Naphtha-Type Jet Fuel																	
Refinery	274	30	304	0	789	61	266	1,116	261	724	712	166	173	2,036	259	852	4,567
Bulk Terminal	—	—	258	—	—	—	—	984	—	—	—	—	—	201	6	416	1,865
Pipeline	—	—	115	—	—	—	—	222	—	—	—	—	—	467	103	494	1,401
Total	—	—	677	—	—	—	—	2,322	—	—	—	—	—	2,704	368	1,762	7,833
Kerosene-Type Jet Fuel																	
Refinery	1,192	0	1,192	35	1,118	83	178	1,414	275	2,989	1,820	7	74	5,165	352	3,727	11,850
Bulk Terminal	—	—	4,484	—	—	—	—	4,568	—	—	—	—	—	2,253	234	1,552	13,091
Pipeline	—	—	3,560	—	—	—	—	1,909	—	—	—	—	—	2,957	133	358	8,917
Total	—	—	9,236	—	—	—	—	7,891	—	—	—	—	—	10,375	719	5,637	33,858
Kerosene																	
Refinery	347	82	429	0	412	33	189	634	41	935	527	9	86	1,598	4	292	2,957
Bulk Terminal	—	—	2,914	—	—	—	—	944	—	—	—	—	—	830	22	81	4,791
Pipeline	—	—	333	—	—	—	—	167	—	—	—	—	—	274	0	0	774
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	2
Total	—	—	3,676	—	—	—	—	1,745	—	—	—	—	—	2,704	26	373	8,524
Distillate Fuel Oils																	
Refinery	6,176	286	6,462	83	5,414	1,480	2,275	9,252	1,146	10,283	4,485	882	229	17,025	1,826	4,985	39,550
Bulk Terminal	—	—	38,167	—	—	—	—	16,394	—	—	—	—	—	6,385	677	5,178	66,801
Pipeline	—	—	6,276	—	—	—	—	7,993	—	—	—	—	—	9,040	538	839	24,686

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, July 1983
(Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mts.	Dist. V West Coast	United States
Distillate Fuel Oils																	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	50,905	0	0	0	0	33,639	0	0	0	0	0	32,450	3,041	11,002	131,037
Residual Fuel Oils																	
Refinery	4,233	101	4,334	49	1,839	205	239	2,332	170	4,618	2,707	163	49	7,707	497	6,521	21,391
Bulk Terminal	—	—	20,979	—	—	—	—	1,412	—	—	—	—	—	6,048	0	2,028	30,467
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	1	0	9	10
Total	—	—	25,313	—	—	—	—	3,744	—	—	—	—	—	13,756	497	8,558	51,868
Naphtha < 400 Deg. Petro. Feedstock																	
Refinery	43	0	43	0	165	0	57	222	139	943	614	55	0	1,751	0	210	2,226
Total	43	0	43	0	165	0	57	222	139	943	614	55	0	1,751	0	210	2,226
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery	5	0	5	0	29	0	1	30	224	1,245	244	0	0	1,713	2	482	2,232
Total	5	0	5	0	29	0	1	30	224	1,245	244	0	0	1,713	2	482	2,232
Special Naphthas																	
Refinery	22	41	63	0	150	0	165	315	31	1,233	55	146	0	1,465	18	295	2,156
Bulk Terminal	—	—	781	—	—	—	—	296	—	—	—	—	—	67	0	44	1,188
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	110	0	0	0	0	110	0	0	110
Total	—	—	844	—	—	—	—	611	—	—	—	—	—	1,642	18	339	3,454
Lubricants																	
Refinery	951	957	1,908	0	702	0	255	957	40	3,115	857	548	0	4,560	63	612	8,100
Bulk Terminal	—	—	1,271	—	—	—	—	1,289	—	—	—	—	—	255	2	705	3,522
Total	—	—	3,179	—	—	—	—	2,246	—	—	—	—	—	4,815	65	1,317	11,622
Waxes																	
Refinery	17	139	156	0	48	0	47	95	30	274	162	90	0	556	1	79	887
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	156	—	—	—	—	95	—	—	—	—	—	556	1	79	887
Petroleum Coke																	
Refinery	683	0	683	0	791	153	268	1,212	5	46	477	150	0	678	140	2,104	4,817
Total	683	0	683	0	791	153	268	1,212	5	46	477	150	0	678	140	2,104	4,817
Asphalt and Road Oil																	
Refinery	1,623	44	1,667	331	3,419	1,958	1,041	6,749	550	521	842	787	253	2,953	1,862	2,082	15,313
Bulk Terminal	—	—	3,376	—	—	—	—	3,450	—	—	—	—	—	438	76	280	7,500
Total	—	—	5,043	—	—	—	—	10,199	—	—	—	—	—	3,391	1,938	2,342	22,913
Miscellaneous Products																	
Refinery	248	31	279	1	61	15	8	85	36	328	60	46	0	470	24	214	1,072
Bulk Terminal	—	—	62	—	—	—	—	62	—	—	—	—	—	45	0	86	255
Pipeline	—	—	3	—	—	—	—	27	—	—	—	—	—	174	0	0	204
Natural Gas Processing Plant	0	0	0	0	1	0	0	1	33	3	0	1	0	37	1	0	39
Total	—	—	344	—	—	—	—	175	—	—	—	—	—	726	25	300	1,570
Total Stocks, All Oils	—	—	199,055	—	—	—	—	266,323	—	—	—	—	—	764,615	30,497	173,710	1,434,200

1 Includes 33,879 thousand barrels of domestic crude oil.
Sources: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, July 1983
(Thousand Barrels)

Commodity	From I to					From II to					From III to					From IV to					From V to			
	II		III		V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III	IV				
	II	III	V	I	III	IV	V	I	II	IV	V	I	II	III	V	I	II	III	IV					
Crude Oil (Tanker and Barge only)	0	0	0	0	0	0	0	0	0	416	1,931	0	0	0	0	0	4,490	0	17,694	0				
Petroleum Products	8,113	204	0	3,388	5,586	2,171	348	79,895	27,220	0	2,124	1,958	348	1,262	0	0	0	0	8	0				
Natural Gasoline and Isopentane	0	0	0	0	76	0	0	0	550	0	0	5	0	0	0	0	0	0	0	0				
Unfractionated Stream	0	0	0	0	639	0	0	0	865	0	0	659	348	0	0	0	0	0	0	0				
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Liquefied Petroleum Gases	0	0	0	462	1,971	45	0	1,198	3,868	0	0	241	0	0	0	0	0	0	0	0				
Unfinished Oils	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	1,239	0	0	0	0	0	0	0	0	0	0	0				
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Finished Motor Gasoline	5,995	0	0	1,924	1,677	1,369	62	51,358	11,426	0	1,128	606	0	857	0	0	0	0	0	0				
Finished Leaded Motor Gasoline	3,400	0	0	798	898	776	0	20,546	5,953	0	611	370	0	595	0	0	0	0	0	0				
Finished Unleaded Motor Gasoline	2,595	0	0	1,126	779	593	62	30,812	5,473	0	517	236	0	262	0	0	0	0	0	0				
Finished Aviation Gasoline	12	0	0	0	0	24	0	206	242	0	0	0	0	0	0	0	0	0	0	0				
Naphtha-Type Jet Fuel	147	0	0	0	133	0	0	716	136	0	266	71	0	0	0	0	0	0	0	0				
Kerosene-Type Jet Fuel	155	0	0	194	63	530	0	8,677	1,925	0	183	0	0	141	0	0	0	0	0	0				
Kerosene	0	0	0	0	0	0	0	194	38	0	0	0	0	0	0	0	0	0	0	0				
Distillate Fuel Oil	1,742	0	0	290	625	203	286	14,106	5,546	0	356	376	0	264	0	0	0	0	0	0				
Residual Fuel Oil	0	90	0	47	287	0	0	2,149	22	0	0	0	0	0	0	0	0	0	8	0				
Naphtha and Other Oils for Petro	17	0	0	0	0	0	0	29	8	0	0	0	0	0	0	0	0	0	0	0				
Feedstock	0	0	0	15	0	0	0	226	145	0	0	0	0	0	0	0	0	0	0	0				
Special Naphthas	0	0	0	28	0	0	0	689	394	0	191	0	0	0	0	0	0	0	0	0				
Lubricants	7	60	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0				
Waxes	0	0	0	0	0	0	0	178	737	0	0	0	0	0	0	0	0	0	0	0				
Asphalt and Road Oil	0	0	0	266	0	0	0	162	79	0	0	0	0	0	0	0	0	0	0	0				
Miscellaneous Products	38	54	0	153	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total All Products	8,113	204	0	3,388	5,586	2,171	348	80,311	29,151	0	2,124	1,958	348	1,262	0	4,490	0	17,702	0	0				

Sources. See Explanatory Notes on Data Collection and Estimation

Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, July 1983
(Thousand Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to		
	II	III	I	I	III	IV	I	II	IV	V	II	III	V	III	IV
Natural Gasoline and Isopentane	0	0	0	0	76	0	0	550	0	0	0	5	0	0	0
Unfractionated Stream	0	0	0	0	639	0	0	865	0	0	0	659	348	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	0	0	462	1,971	45	1,027	3,868	0	0	0	241	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	1,239	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	4,392	0	1,588	1,677	1,369	39,620	10,433	884	606	0	884	606	0	857	0
Finished Leaded Motor Gasoline	2,450	0	654	898	776	15,947	5,521	470	370	0	470	370	0	595	0
Finished Unleaded Motor Gasoline	1,942	0	934	779	593	23,673	4,912	414	236	0	414	236	0	262	0
Finished Aviation Gasoline	12	0	0	0	24	49	195	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	133	0	321	136	266	71	0	266	71	0	0	0
Kerosene-Type Jet Fuel	74	0	187	63	530	5,431	1,653	183	0	0	183	0	0	141	0
Kerosene	0	0	0	0	0	160	38	0	0	0	0	0	0	0	0
Distillate Fuel Oil	1,241	0	250	625	203	10,935	4,375	356	376	0	356	376	0	264	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0
Total	5,719	0	2,631	5,184	2,171	57,543	23,352	1,689	1,958	348	1,689	1,958	348	1,262	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, July 1983
(Thousand Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III
Crude Oil	0	0	0	0	0	0	0	416	0	416	0	1,931	0	4,490	0
Petroleum Products	2,394	204	0	757	402	348	22,352	1,568	4,265	16,519	3,868	435	0	0	8
Liquefied Petroleum Gases	0	0	0	0	0	0	171	0	0	171	0	0	0	0	0
Unfinished Oils	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	1,603	0	0	336	0	62	11,738	464	1,586	9,688	993	244	0	0	0
Finished Aviation Gasoline	147	0	0	0	0	0	157	28	55	74	47	0	0	0	0
Naphtha-Type Jet Fuel	81	0	0	7	0	0	395	0	0	395	0	0	0	0	0
Kerosene-Type Jet Fuel	501	0	0	40	0	0	3,246	314	823	2,109	272	0	0	0	0
Kerosene	0	0	0	0	0	0	34	0	18	16	0	0	0	0	0
Distillate Fuel Oil	0	0	0	47	287	286	3,171	553	300	2,318	1,171	0	0	0	0
Residual Fuel Oil	17	90	0	0	0	0	2,149	209	859	1,081	22	0	0	0	8
Naphtha and Other Oils for Petro. Feed. Use	0	0	0	15	0	0	29	0	0	29	8	0	0	0	0
Special Naphthas	0	0	0	28	0	0	226	0	119	107	145	0	0	0	0
Lubricants	7	60	0	0	0	0	689	0	395	294	394	191	0	0	0
Waxes	0	0	0	0	0	0	7	0	7	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	266	0	0	178	0	9	169	737	0	0	0	0
Miscellaneous Products	38	54	0	9	115	0	162	0	94	68	79	0	0	0	0
Total	2,394	204	0	757	402	348	22,768	1,568	4,681	16,519	5,799	435	4,490	0	17,702

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, July 1983
(Thousand Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts into PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts into PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts into PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts into PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts into PADD V
Crude Oil (Tanker and Barge only)	4,906	0	4,906	1,931	0	1,931	17,694	2,347	15,347	0	0	0	0	22,184	-22,184
Petroleum Products	83,283	8,317	74,966	37,291	11,493	25,798	6,146	109,239	-103,093	2,171	3,568	-1,397	3,734	8	3,726
Natural Gasoline	0	0	0	555	76	479	76	550	-474	0	5	-5	0	0	0
Unfractionated Stream	0	0	0	1,524	639	885	987	865	122	0	1,007	-1,007	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	1,660	0	1,660	4,109	2,478	1,631	1,971	5,066	-3,095	45	241	-196	0	0	0
Unfinished Oils	9	0	9	0	9	-9	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	1,239	0	1,239	0	1,239	-1,239	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	53,282	5,995	47,287	18,027	5,032	12,995	1,677	63,912	-62,235	1,369	1,463	-94	2,047	0	2,047
Finished Leaded Motor Gasoline	21,344	3,400	17,944	9,723	2,472	7,251	898	27,110	-26,212	776	965	-189	1,206	0	1,206
Finished Unleaded Motor Gasoline	31,938	2,595	29,343	8,304	2,560	5,744	779	36,802	-36,023	593	498	95	841	0	841
Finished Aviation Gasoline	206	12	194	254	24	230	0	448	-448	24	0	24	0	0	0
Naphtha-Type Jet Fuel	716	147	569	354	133	221	133	1,118	-985	0	71	-71	266	0	266
Kerosene-Type Jet Fuel	8,871	155	8,716	2,080	787	1,293	63	10,785	-10,722	530	141	389	324	0	324
Kerosene	194	0	194	38	0	38	0	232	-232	0	0	0	0	0	0
Distillate Fuel Oil	14,396	1,742	12,654	7,664	1,404	6,260	625	20,008	-19,383	203	640	-437	906	0	906
Residual Fuel Oil	2,196	90	2,106	22	334	-312	385	2,171	-1,786	0	0	0	0	8	-8
Naphtha and Other Oils for Petro.															
Feedstock Use	29	17	12	25	0	25	0	37	-37	0	0	0	0	0	0
Special Naphthas	241	0	241	145	15	130	0	371	-371	0	0	0	0	0	0
Lubricants	717	67	650	401	28	373	60	1,274	-1,214	0	0	0	191	0	191
Waxes	7	0	7	0	0	0	0	7	-7	0	0	0	0	0	0
Asphalt and Road Oil	444	0	444	737	266	471	0	915	-915	0	0	0	0	0	0
Miscellaneous Products	315	92	223	117	268	-151	169	241	-72	0	0	0	0	0	0
Total All Products	88,189	8,317	79,872	39,222	11,493	27,729	23,840	111,586	-87,746	2,171	3,568	-1,397	3,734	22,192	-18,458

Sources: See Explanatory Notes on Data Collection and Estimation.

**Table 25. Production of Residual Fuel Oil By Sulfur Content, July 1983
(Thousand Barrels)**

Commodity	PAD District I					PAD District II					PAD District III					Total		PAD Dist. V West Coast	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Coast	No. Ark.	New Mexico						
Residual Fuel Oil	2,729	53	2,782	62	1,339	216	335	1,952	600	7,006	2,149	261	45	10,061	359	8,748	23,902		
0.00 to 0.30% Sulfur	707	29	736	0	65	0	111	176	45	341	40	90	10	526	48	1,062	2,548		
0.31 to 1.00% Sulfur	1,889	1	1,890	-14	324	0	150	460	481	2,225	449	77	0	3,232	109	2,564	8,255		
Greater Than 1.00% Sulfur	133	23	156	76	950	216	74	1,316	74	4,440	1,660	94	35	6,303	202	5,122	13,099		

Source: See Explanatory Notes on Data Collection and Estimation

Source* See Explanatory Notes on Data Collection and Estimation

**Table 26. Stocks of Residual Fuel Oil By Sulfur Content, July 1983
(Thousand Barrels)**

Commodity	PAD District I			PAD District II				PAD District III					PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mtn.	Dist. V West Coast
Residual Fuel Oil - 0.00 to 0.30% Sulfur																	
Refinery	530	40	570	0	137	0	57	194	22	242	114	17	10	405	131	773	2,073
Bulk Terminal	—	—	4,241	—	—	—	—	78	—	—	—	—	—	38	0	0	4,357
Total	—	—	4,811	—	—	—	—	272	—	—	—	—	—	443	131	773	6,430
Residual Fuel Oil - 0.31 to 1.00% Sulfur																	
Refinery	2,442	5	2,447	45	549	0	130	724	84	1,626	697	54	0	2,461	97	2,077	7,806
Bulk Terminal	—	—	7,598	—	—	—	—	545	—	—	—	—	—	3,060	0	614	11,807
Total	—	—	10,035	—	—	—	—	1,269	—	—	—	—	—	5,521	97	2,691	19,613
Residual Fuel Oil - Greater than 1.00% Sulfur																	
Refinery	1,261	56	1,317	4	1,153	205	52	1,414	64	2,750	1,896	92	39	4,841	269	3,671	11,512
Bulk Terminal	—	—	9,150	—	—	—	—	789	—	—	—	—	—	2,950	0	1,414	14,303
Total	—	—	10,467	—	—	—	—	2,203	—	—	—	—	—	7,791	269	5,085	25,815

Sources: See Explanatory Notes on Data Collection and Estimation

Sources: See Explanatory Notes on Data Collection and Estimation
— Not Applicable

**Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, July 1983
(Thousand Barrels)**

Commodity	From I to			From II to			From III to						From V to			
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III	
Residual Fuel Oil	0	90	0	47	287	0	2,149	209	859	1,081	22	0	0	0	8	
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
0.31 to 1.00% Sulfur	0	0	0	4	0	0	615	209	197	209	0	0	0	0	0	
Greater Than 1.00% Sulfur	0	90	0	43	287	0	1,534	0	662	872	22	0	0	0	8	

Source: See Explanatory Notes on Data Collection and Estimation

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, July 1983
(Thousand Barrels)

Country	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
Arab OPEC				
Algeria	351	0	0	351
Iraq	0	0	0	0
Kuwait	498	0	0	498
Libya	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	0	0	0	0
Subtotal Arab OPEC	849	0	0	849
Other OPEC				
Ecuador	0	0	129	129
Gabon	0	0	0	0
Indonesia	505	75	5	584
Iran	0	0	0	0
Nigeria	0	0	0	0
Venezuela	1,175	23	2,519	3,717
Subtotal Other OPEC	1,680	97	2,652	4,430
Other				
Angola	0	305	0	305
Australia	0	0	0	0
Bahamas	477	35	372	883
Bolivia	0	0	0	0
Brazil	336	0	0	336
Brunel	0	0	0	0
Canada	162	780	122	1,064
Congo	0	0	0	0
Egypt	0	0	0	0
France	0	0	0	0
Ghana	0	0	0	0
Liberia	0	0	0	0
Malaysia	0	11	32	43
Mexico	9	0	206	215
Netherlands	0	0	0	0
Netherlands Antilles	0	336	3,218	3,554
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	0	0	0
Peru	221	755	0	976
Puerto Rico	0	0	0	0
Romania	0	0	0	0
Spain	0	0	0	0
Syria	0	0	0	0
Trinidad	23	0	519	542
Tunisia	0	0	0	0
United Kingdom	0	286	0	286
Virgin Islands	1,144	1,683	1,035	3,863
Yugoslavia	0	0	0	0
Zaire	0	0	0	0
Arab OPEC				
Other Western Hemisphere	367	758	567	1,692
Other Eastern Hemisphere	544	1,353	220	2,117
Subtotal Other	3,284	6,302	6,290	15,875
Total Imports	5,813	6,399	8,942	21,154

(*) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, July 1983
(Thousand Barrels)

State	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
PAD District I	3,927	5,808	8,458	18,193
Connecticut	544	0	0	544
Delaware	0	0	139	139
Florida	0	993	1,545	2,538
Georgia	0	0	298	298
Maine	0	0	484	484
Maryland	0	0	203	203
Massachusetts	0	643	1,511	2,154
New Hampshire	0	0	447	447
New Jersey	283	1,075	1,644	3,002
New York	3,075	2,214	1,171	6,461
Pennsylvania	23	883	225	1,131
Rhode Island	0	0	103	103
South Carolina	0	0	107	107
Vermont	2	0	0	2
Virginia	0	0	579	579
PAD District II	160	349	36	545
Illinois	0	159	0	159
Michigan	160	175	0	336
Minnesota	0	0	7	7
North Dakota	0	0	29	29
Ohio	0	14	0	14
PAD District III	1,724	0	333	2,057
Louisiana	298	0	6	304
Texas	1,426	0	327	1,753
PAD District IV	0	0	5	5
Montana	0	0	5	5
PAD District V	1	242	111	354
California	(s)	0	5	6
Hawaii	1	242	105	348
All PAD Districts	5,813	6,399	8,942	21,154

(s) Less than 500 barrels

Note: Total may not equal sum of components due to independent rounding

Sources: See Explanatory Notes on Data Collection and Estimation

Glossary



Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}-(\text{CH})_n-\text{OH}$. *Alcohol* includes methanol and ethanol.

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr } 60\text{F}/60\text{F}} - 131.5$$

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline, Finished. All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels per Calendar Day. The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Bi-metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhodium).

Butane. A normally gaseous paraffinic hydrocarbon, C_4H_{10} . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

Isobutane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Normal Butane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

Other Butanes. All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C_4H_8 , recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (Including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

Domestic. Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

Foreign. Crude oil produced outside the United States.

Delayed Coking. A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM

Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic compound (C₂H₆) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C₂H₄) recovered from refinery or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turbo-prop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, specialty oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline, Finished. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Motor Gasoline, Total. Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished

motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C₅H₁₂, obtained by fractionation of natural gasoline or isomerization of normal pentane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, glisonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point*.

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green* coke may be sold or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous paraffinic compound, C₃H₈, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

Propylene. An olefinic hydrocarbon, C₃H₆, recovered from refinery or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in

six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less than atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary

distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum. Viscosity at 210 degrees F. in Saybolt Universal Sec-

onds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts.

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

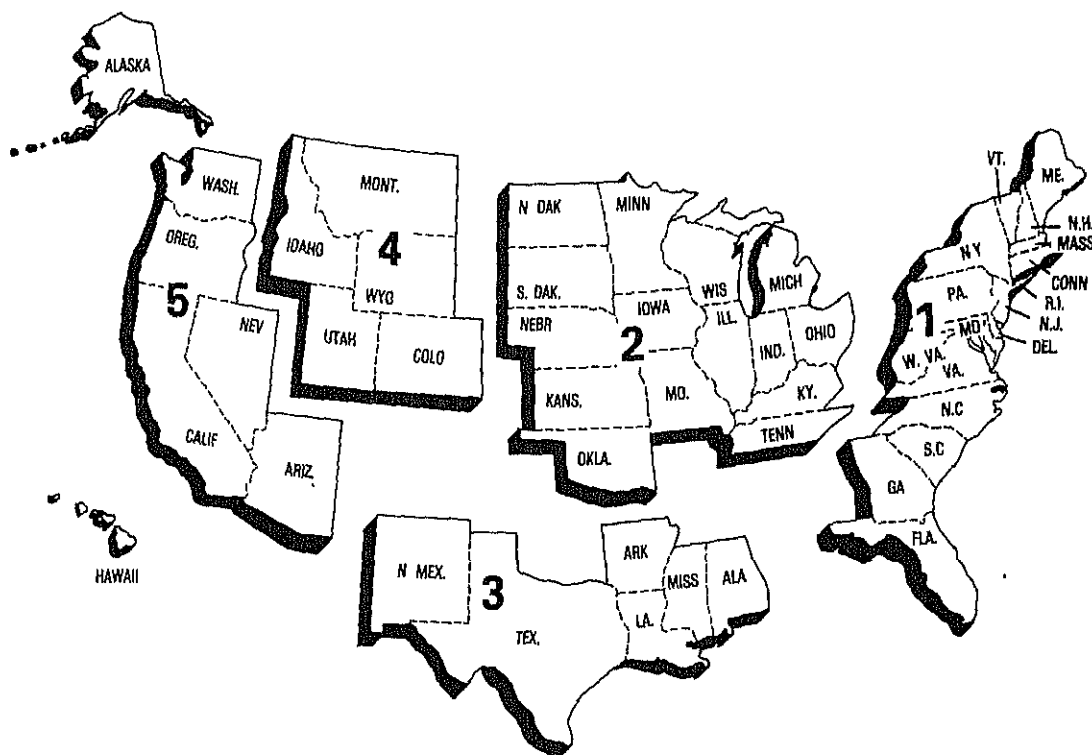
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

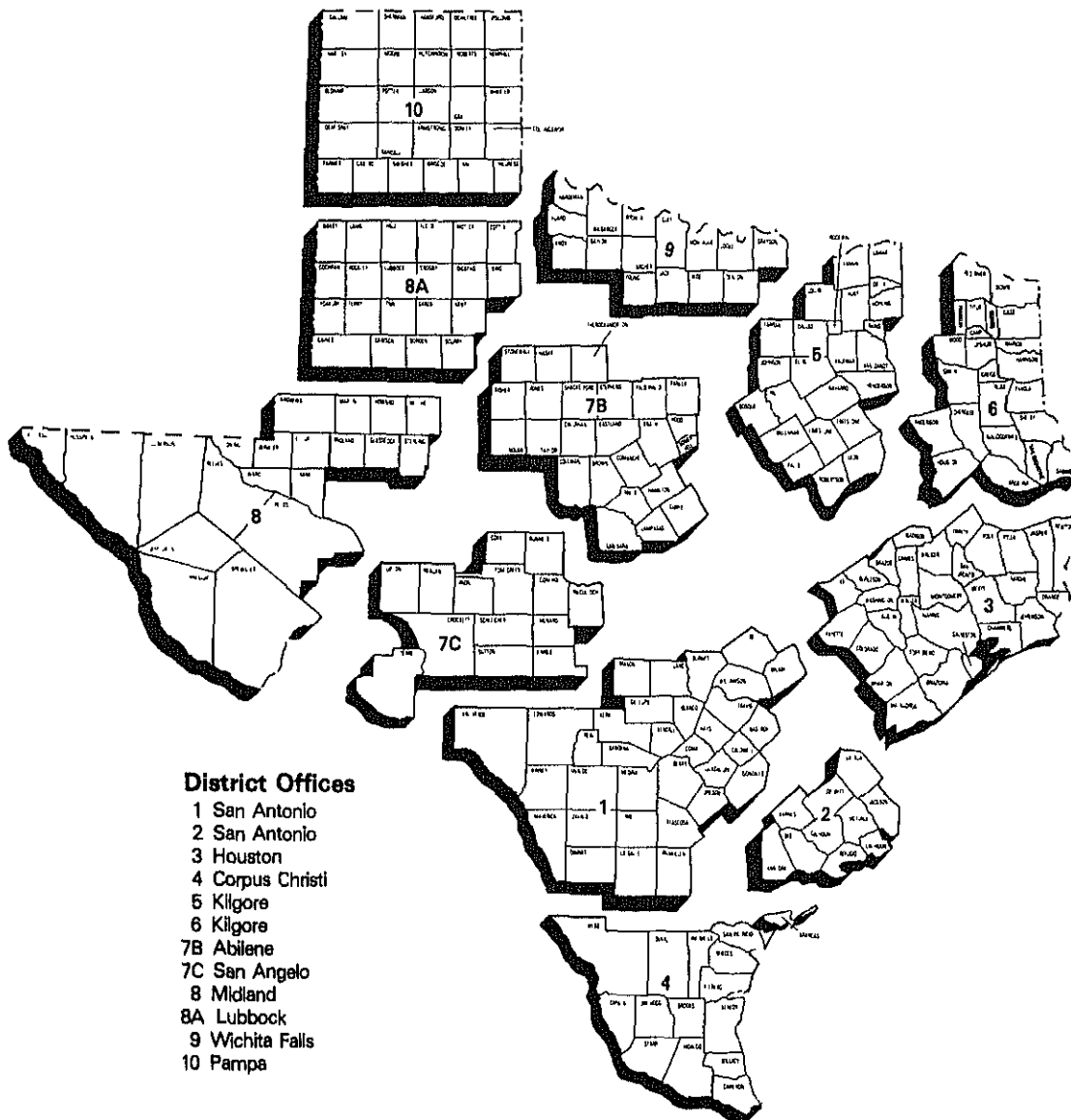
Petroleum Administration for Defense (PAD) Districts



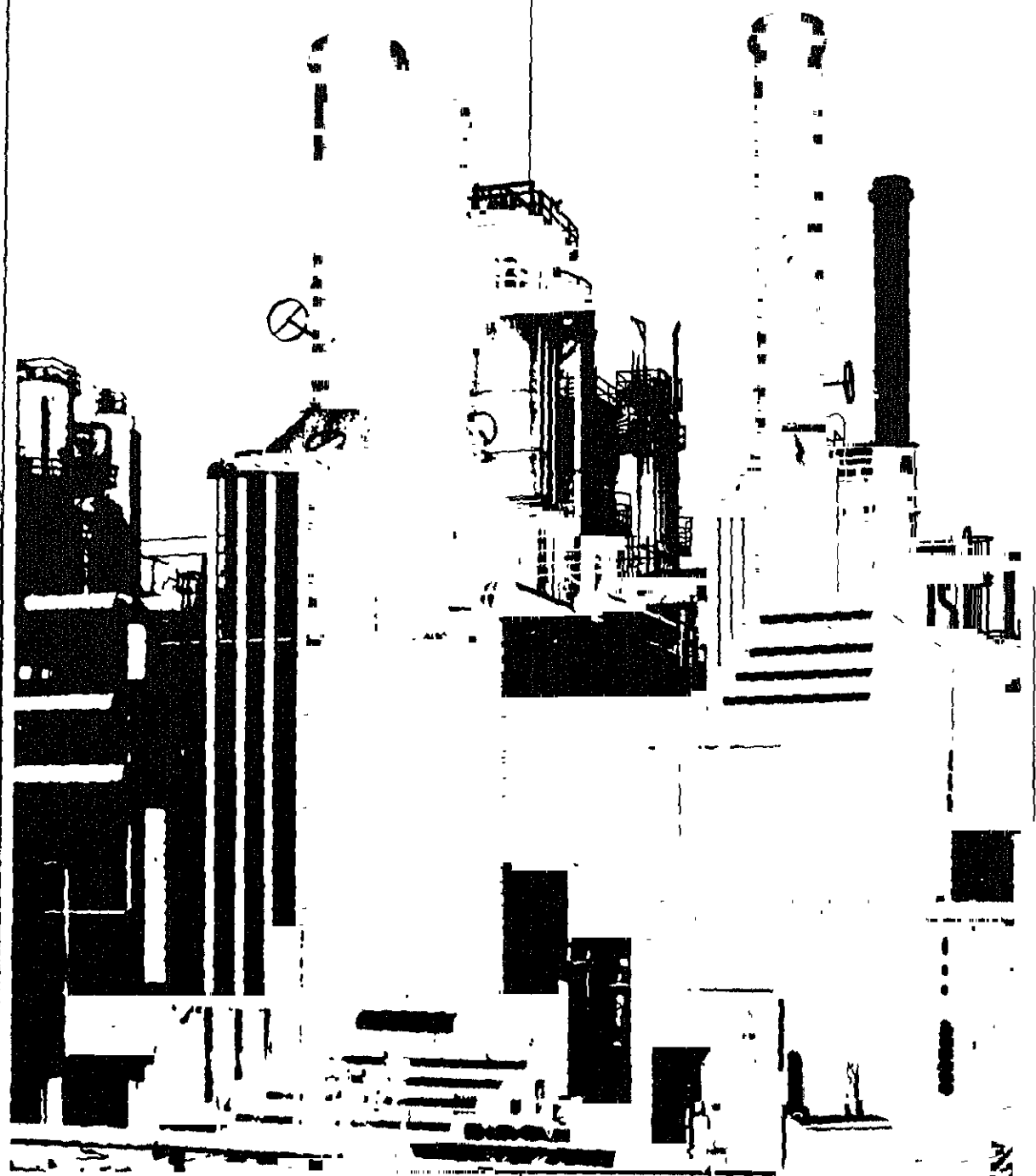
Bureau of Mines Refining Districts



District Map Oil and Gas Division Railroad Commission of Texas



Explanatory Notes



Note 1: Data Collection Methodology

Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-804: Based on the EIA-814 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the PSM.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the PSM.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)
3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

Field Production is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

Refinery Production of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. It should also be noted that refineries do not export production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases

(LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

Refinery Inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1-1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on April 1 and October 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude losses and Product Supplied appear as labeled in Table 4.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousands of barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

Note 9.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska*, *Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on Survey Form ERA-60.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.

- Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): *NGPL Imports* equals the sum of the Im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

- Line (16): *NGPL Stock Withdrawal (+) or Addition (-)* is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.
- Line (17) equals the sum of lines (14), (15), and (16).
- Line (18): *Unfinished oils and gasoline blending components Stock Withdrawal (+) or Addition (-)* equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.
- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.
- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.
- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).
- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.
- Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.
- Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.
- Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).
- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products in Table 2.
- Line (29): *Refined Products Stocks Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.
- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.
- Lines (31) through (35) equal the respective products supplied in Table 2.
- Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.
- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.
- The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.
- Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

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